

179255

WILLOUGHBY & HOEFER, P.A.

ATTORNEYS & COUNSELORS AT LAW
930 RICHLAND STREET (SUITE 400)
P.O. BOX 8416
COLUMBIA, SOUTH CAROLINA 29202-8416

MITCHELL M. WILLOUGHBY
JOHN M.S. HOEFER
ELIZABETH ZECK*
PAIGE J. GOSSETT
RANDOLPH R. LOWELL
K. CHAD BURGESS
NOAH M. HICKS II**
M. MCMULLEN TAYLOR
BENJAMIN P. MUSTIAN

AREA CODE 803
TELEPHONE 252-3300
TELECOPIER 256-8062

May 1, 2006

*ALSO ADMITTED IN TX
**ALSO ADMITTED IN VA

VIA HAND DELIVERY

The Honorable Charles Terreni
Chief Clerk/Administrator
South Carolina Public Service Commission
101 Executive Center Drive
Columbia, South Carolina 29210

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2006 MAY -1 PM 4:36
SC PUBLIC SERVICE
COMMISSION

RE: South Carolina Pipeline Corporation - Annual Review of the Purchased Gas
Adjustments and Gas Purchasing Policies;
Docket No. 2006-6-G

Dear Mr. Terreni:

Enclosed for filing, on behalf of South Carolina Pipeline Corporation, is the Direct
Testimony of Samuel L. Dozier, Michael P. Wingo, John S. Beier, and Thomas R. Conard.
Please accept the original and twenty-five (25) copies of each for filing. Additionally, please
acknowledge your receipt of these documents by file-stamping the extra copies that are enclosed
and returning them to me via my courier.

By copy of this letter, I am serving all other parties of record with a copy of the enclosed
Direct Testimony and attach a certificate of service to that effect.

If there are any questions regarding this matter, please do not hesitate to contact me.

Very truly yours,

WILLOUGHBY & HOEFER, PA



K. Chad Burgess

KCB/amw
Enclosures

RETURN DATE: OK D. Duke
SERVICE: OK D. Duke

(Continued ...)

The Honorable Charles Terreni

May 1, 2006

Page 2

cc: Patricia Banks Morrison, Esquire (via hand delivery w/ enclosures)
Wendy B. Cartledge, Esquire (via hand delivery w/ enclosures)
James N. Horwood, Esquire (via overnight delivery w/ enclosures)
Paul W. Dillingham, Esquire (via overnight delivery w/ enclosures)
Scott Elliott, Esquire (via hand delivery w/ enclosures)

BEFORE
THE PUBLIC SERVICE COMMISSION OF
SOUTH CAROLINA
DOCKET NO. 2006-6-G

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SC PUBLIC SERVICE
COMMISSION

IN RE:

South Carolina Pipeline Corporation)
Annual Review of the Purchased)
Gas Adjustments and Gas)
Purchasing Policies)
_____)

CERTIFICATE OF SERVICE

This is to certify that I have caused to be served this day one (1) copy of **Direct**
Testimony of Samuel L. Dozier, Michael P. Wingo, John S. Beier, and Thomas R. Conard,
via hand delivery, upon the persons named below at the addresses set forth:

Wendy B. Cartledge, Esquire
South Carolina Office of Regulatory Staff
1441 Main Street, Suite 300
Columbia, SC 29201

Scott Elliott, Esquire
Elliott & Elliott, P.A.
721 Olive Street
Columbia, SC 29205

This is to further certify that I have caused to be served this day one (1) copy of the **Direct**
Testimony of Samuel L. Dozier, Michael P. Wingo, John S. Beier, and Thomas R. Conard,
via overnight delivery, upon the persons named below at the addresses set forth:

James N. Horwood, Esquire
Pablo O. Nüesch, Esquire
Spiegel & McDiarmid
1333 New Hampshire Avenue, NW, Suite 1100
Washington, DC 20005-4798

(Continued . . .)

Paul W. Dillingham, Esquire
Spencer & Spencer, P.A.
226 East Main Street, Suite 200
Rock Hill, SC 29731

Andrea M Wright
Andrea M. Wright

Columbia, South Carolina
This 1st day of May, 2006.

**DIRECT TESTIMONY OF
SAMUEL L. DOZIER
ON BEHALF OF
SOUTH CAROLINA PIPELINE CORPORATION
DOCKET NO. 2006-6-G**

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SC PUBLIC SERVICE
COMMISSION

Q. PLEASE STATE YOUR NAME AND POSITION.

A. I am Sam Dozier, Vice President, Commercial & Field Operations for South Carolina Pipeline Corporation ("SCPC" or "Company").

Q. PLEASE DESCRIBE YOUR EDUCATION, BACKGROUND AND BUSINESS EXPERIENCE.

A. I am a native of Marion County, South Carolina and graduated from Clemson University with a degree in Mechanical Engineering. I have a Master of Business Administration degree from the University of South Carolina. Over the years, I have served in a number of positions at SCANA. Most recently, I served as SCPC's Vice President for Customer Service and Market Development. I held this position for ten years until January 2006 when I was named Vice President, Commercial & Field Operations for SCPC.

Q. WHAT ARE YOUR DUTIES WITH SCPC?

A. As Vice President, Commercial & Field Operations for SCPC, my responsibilities include the day-to-day management of SCPC's relationships with its customers and the marketing of new capacity on SCPC's system. My other corporate duties include oversight of certain operations at SCPC. Specifically, I am in charge of the Company's construction projects, right-of-way acquisition and

1 maintenance, engineering, and environmental compliance.

2 **Q. PLEASE DESCRIBE THE PURPOSE OF YOUR TESTIMONY.**

3 A. The primary purpose of my testimony is to discuss with the Commission
4 the Company's Industrial Sales Program-Rider ("ISP-R"), including the benefits
5 that customers on SCPC's system receive as a result of this program. However,
6 before I discuss the ISP-R, I begin my testimony with a brief overview of SCPC's
7 system from an operating standpoint in which I address the principal facilities that
8 comprise the system, including the capacity of the system for serving SCPC's
9 customers. Next, I discuss SCPC's customers, rates, and contracts, and review the
10 growth of demand on the Company's system. I conclude my testimony by
11 providing the Commission with an update on the pending merger between SCPC
12 and SCG Pipeline, Inc. ("SCG").

13 **Q. PLEASE DESCRIBE SCPC'S SYSTEM FROM AN OPERATIONS**
14 **STANDPOINT.**

15 A. SCPC operates a high-pressure, intrastate natural gas system consisting of
16 approximately 1,449 miles of transmission pipeline, which provides natural gas,
17 either directly or indirectly to 40 of South Carolina's 46 counties. The Company
18 receives gas from the interstate pipelines operated by Southern Natural Gas
19 Company ("Southern") and Transcontinental Gas Pipe Line Corporation
20 ("Transco"). In fact, SCPC is Southern's largest customer downstream of Atlanta.
21 SCPC's principal receipt point from the Southern system is at Aiken and its

1 principal receipt point from Transco is at Grover.

2 In addition to Southern and Transco, SCPC also has the ability to receive
3 gas from a third interstate pipeline, namely SCG. SCPC receives gas from SCG
4 on an interruptible basis through a receipt point in Jasper County.

5 **Q. PLEASE DESCRIBE THE COMPRESSION FACILITIES SCPC**
6 **OPERATES.**

7 A. SCPC operates compressor stations at Aiken Southern, Grover, and
8 Camden. These compressor stations use gas-powered turbines to move gas into
9 and through SCPC's system and to raise the pressure of gas within the Company's
10 lines. Located on these sites are a total of twenty-four (24) 1,050 horsepower
11 compressors. These compressors allow the Company to increase the throughput of
12 the system, to control the pressure on the system, and to control the amount of gas
13 stored in the system through a concept called "line pack."

14 Through the Aiken Southern station, SCPC can use the compression
15 capability to whichever route has the greatest need – south to Charleston, east to
16 Columbia, northeast to Bethune, or to the Clinton-Newberry service area. This
17 provides SCPC with great flexibility and operational control characteristics.

18 **Q. WHAT LIQUIFIED NATURAL GAS ("LNG") FACILITIES DOES SCPC**
19 **OPERATE?**

20 A. SCPC operates LNG facilities at Bushy Park, South Carolina, near North
21 Charleston, and at Salley, located in western Orangeburg County. These facilities

1 allow SCPC to store natural gas in a liquid form and inject vaporized gas into
2 SCPC's system when needed. The LNG facilities are used primarily as a
3 mechanism to help meet peak loads on the system and as a backup supply of gas in
4 emergency situations.

5 As Mr. Wingo will testify to in greater detail, SCPC's management
6 analyzes and considers the supply and interstate capacity aspects of its business on
7 an on-going basis in order to provide safe, reliable, and economical natural gas
8 service to South Carolina. Variables related to the growth of our State and the
9 demand on SCPC's system must be balanced with corresponding supply and
10 capacity needs.

11 **Q. WHAT ARE THE CAPACITIES OF THE LNG FACILITIES?**

12 A. The Bushy Park facility has the capability of converting natural gas into a
13 liquid, a process known as liquefaction. It can store up to 980,000 Mcf (thousand
14 cubic feet) of LNG. The Salley facility has the capability of storing up to 900,000
15 Mcf of trucked-in LNG. At the end of the review period, LNG storage volumes at
16 SCPC's Bushy Park and Salley facilities were 941,474 Mcf and 797,070 Mcf,
17 respectively. While these facilities have the "nameplate" capability to vaporize
18 150,000 Mcf/day, our system throughput planning assumes a Maximum Daily
19 Withdrawal Quantity ("MDWQ") of 105,000 Mcf/day.

20 **Q. WHEN DID THE BUSHY PARK LNG FACILITY BEGIN OPERATING?**

21 A. The Bushy Park facility began operating in 1976 to provide additional

1 capacity to the system in general and to provide an additional source of gas supply
2 for Charleston. Until 1984, Charleston was served by a single 10-inch pipeline
3 from Bowman south. Over the years, however, the Bushy Park LNG facility has
4 provided an important reliability function for the pipeline system as a whole.

5 **Q. WHAT STEPS HAS SCPC TAKEN IN RECENT YEARS TO IMPROVE**
6 **ITS SYSTEM?**

7 A. Over the years, SCPC has consistently upgraded its system by adding
8 pipeline and compression to meet new demand and to create operating flexibility
9 on its system. One of SCPC's long-term strategic goals has been to reduce its
10 reliance on any one upstream pipeline and better balance its system.

11 **Q. PLEASE EXPLAIN THE IMPORTANCE OF BALANCED INTERSTATE**
12 **CAPACITY.**

13 A. Historically, the two systems that were merged to form SCPC relied on
14 Southern for approximately eighty-five percent (85%) of their combined supply.
15 The remaining approximately fifteen percent (15%) of supply came from Transco.
16 This reliance was a function of the physical limitations of operating two
17 independent systems, the largest of which (SCE&G) did not have high volume
18 pipeline facilities located near the Transco system.

19 During the 1970s and 1980s, demand for natural gas boomed on Southern.
20 As demand grew on Southern's system, capacity on Southern's system became
21 much tighter and more expensive. As a result, SCPC became increasingly

1 concerned about reliability and throughput on Southern. Because Aiken is literally
2 at the end of Southern's system, any problems or limitations upstream on
3 Southern's system translated into significant problems and limitations for SCPC.
4 Creating a more balanced system has been important to the long-term reliability
5 and economic health of our system and to the value SCPC brings its customers.

6 **Q. HOW HAS SCPC CREATED A MORE BALANCED SYSTEM?**

7 A. In the late 1980s and early 1990s, SCPC was required to meet demand that
8 was growing rapidly in the southern and central part of the system. At that time,
9 the two options were building an LNG facility in the Aiken/Orangeburg area or
10 entering into long-term supply contracts with Southern. Because of the
11 configuration of SCPC's system and the location of the load growth, it was not
12 practical to meet the increased demand by increasing our supply from Transco.
13 For the reasons stated above, SCPC was also reluctant to increase its reliance on
14 Southern.

15 However, the construction of an LNG facility was attractive for several
16 reasons. Perhaps the most important reason was the reliability features of LNG
17 service. LNG service is not affected by emergencies on the Company's upstream
18 interstate pipelines that may interrupt flowing gas deliveries. LNG can be
19 available even when flowing gas is limited due to the effects of hurricanes in the
20 Gulf, wellhead freeze-ups due to extreme cold weather and other events on the
21 upstream pipelines that serve SCPC. Having significant LNG available on

1 SCPC's system provided a reliability feature that was very attractive. However,
2 there are duration limitations associated with capacity and inventory available
3 from SCPC's LNG facilities. For example, assuming that storage volumes are at
4 maximum capacity, Bushy Park's inventory would be exhausted in approximately
5 16 days if operated at a withdrawal rate of 60,000 Mcf/day, and Salley's inventory
6 would be exhausted in approximately 20 days if operated at a withdrawal rate of
7 45,000 Mcf/day.

8 The decision to build the Salley facility was also supported by
9 considerations of long-term flexibility and strategic positioning. Choosing to
10 build LNG facilities at Salley allowed the Company to meet demand growth on
11 the southern and central part of its system without further increasing our
12 dependence on Southern. It has also allowed SCPC, through displacement, to
13 choose either Transco or Southern as the source of the additional gas for
14 liquefaction during the summer months when SCPC refills storage.

15 **Q. WHAT IMPROVEMENTS HAS SCPC MADE TO ITS SYSTEM SINCE**
16 **THE SALLEY LNG FACILITY WAS BUILT?**

17 A. Since the construction of Salley in 1992-93, the largest single improvement
18 to the Company's system was the upgrade of its Grover to Bethune facilities. In
19 1995-97, SCPC constructed a new 16-inch high-pressure pipeline along this route
20 (approximately 85 miles). This upgrade was coupled with the construction of a
21 compressor station at Grover with nine (9) new compressor units. At the same

1 time, the Company built a new 12-inch pipeline from Bethune to Florence
2 (approximately 56 miles) to increase deliverability into the rapidly growing areas
3 around Myrtle Beach and to support important industrial loads near Florence.

4 In 1998, SCPC upgraded its Aiken to Gilbert facilities by upgrading
5 twenty-two (22) miles of older 10-inch pipeline to 16-inch high-pressure pipeline.
6 In 2001, the Company reengineered its compressor station at Camden to increase
7 total compression station efficiency to allow bi-directional pumping. SCPC can
8 now use this station to move gas from the northern side of the system (Grover-
9 Bethune) to the southern side (Aiken-Columbia) and vice versa. At the same time,
10 SCPC upgraded the Bethune to Sumter pipeline by adding a new 16-inch high-
11 pressure pipeline. This improvement is important because it removed a bottleneck
12 between the Grover-Bethune side of our system and the Aiken-Columbia side.

13 In 2003, SCPC improved its system further by constructing a new 20-inch
14 pipeline extending from Salley to Eastman (approximately 27 miles), which was
15 designed primarily to serve a generation facility operated by Columbia Energy,
16 LLC in Calhoun County. Additionally, in March 2004, SCPC completed
17 construction of a new pipeline called the South System Loop. The South System
18 Loop is located in the southern part of South Carolina and stretches approximately
19 38 miles from SCG's interconnection point in Jasper County to Yemassee in
20 Hampton County. With the addition of the South System Loop, SCPC has the
21 ability to receive gas from SCG. This is significant because SCPC has access to

1 one of the nation's four existing operational LNG import facilities – Southern
2 LNG Inc. (“Southern LNG”) located on Elba Island, Georgia.

3 **Q. HAS THE COMPANY MADE ANY OTHER IMPROVEMENTS TO ITS**
4 **SYSTEM?**

5 A. Yes. In 2002, the United States Congress passed the Pipeline Safety
6 Improvement Act (the “Pipeline Safety Act”) which directed the U.S. Department
7 of Transportation to establish a pipeline integrity management rule (“Integrity
8 Management Rule”) for operations of natural gas systems with transmission
9 pipelines located near moderate to high density populations. SCPC has
10 approximately 64 miles of transmission line subject to the Integrity Management
11 Rule of the Pipeline Safety Act. SCPC has enhanced the safety and reliability of
12 its system through its integrity management program, which, among other things,
13 identifies high consequence areas on the system, conducts risk analyses of our
14 pipelines in these areas, and performs baseline integrity assessments of each
15 pipeline segment. By implementing this program SCPC continues to ensure that
16 its system is capable of providing safe and reliable service for our customers.

17 **Q. WHAT HAS BEEN THE EFFECT OF THESE IMPROVEMENTS ON**
18 **SYSTEM OPERATIONS?**

19 A. These improvements have been important to meet the growing demand on
20 SCPC's system. Further, these improvements have also allowed SCPC to create a
21 better balance of supply between Southern and Transco and have allowed the

1 Company access to an additional source of supply located at Southern LNG's
2 facilities on Elba Island. Moreover, with the implementation of its integrity
3 management program SCPC has added another layer of protection to its pipeline
4 system as a whole.

5 Over the last ten (10) years, the Company has improved its system so that it
6 has the operating flexibility to accept gas either from Southern or Transco as the
7 situation dictates. The upgrading of the Grover delivery point on Transco, the
8 creation of a bi-directional pumping capability at Camden, and the upgrading of
9 the intervening pipelines between Grover and Aiken, all mean that the Company
10 has increased flexibility to serve its needs and those of its customers from either of
11 the two interstate pipelines. Before the merger, the Company was locked into
12 Southern for over eighty-five percent (85%) of its natural gas supply. Now SCPC
13 has the ability to balance supply between the two upstream interstate pipelines on
14 most days, with sixty percent (60%) supply on Southern's system and forty
15 percent (40%) supply on Transco's system. Further, with the completion of the
16 South System Loop, SCPC has access to additional supplies of gas through a third
17 interstate pipeline, SCG, thereby providing the Company with increased operating
18 flexibility.

19 **Q. PLEASE DESCRIBE FOR THE COMMISSION THE CUSTOMERS THAT**
20 **SCPC SERVES.**

21 **A.** SCPC serves two distinct classes of customers:

1 **Sale for Resale Customers.** SCPC's sale for resale customers are investor
2 owned or governmentally owned gas distribution systems. They resell gas to
3 residential, commercial and industrial customers in their service areas. SCE&G's
4 local gas distribution system is the largest member of this group of customers. In
5 addition, we served 10 publicly owned sale for resale customers, including the
6 York, Chester and Lancaster Natural Gas Authorities (which together comprise the
7 Patriots Energy Group joint municipal gas agency), the Clinton-Newberry Natural
8 Gas Authority, the City of Orangeburg Department of Public Works, and other
9 smaller systems around our service territory.

10 **Industrial Customers.** In addition to our sale for resale customers, we
11 also served approximately 50 direct industrial customers as of December 31, 2005.
12 These are industrial gas users that are connected directly to SCPC's facilities.
13 Examples of major direct industrial customers of SCPC are Voridian (Carolina
14 Eastman) in Calhoun County, several textile plants operated by Milliken &
15 Company in the Upstate, Smurfit-Stone Container in Florence, Nucor Steel in
16 Berkeley County and Darlington County, BP-Amoco in Charleston, and the
17 Bridgestone Firestone plant in Aiken.

18 Also included in this industrial service category is the service SCPC
19 provides to its customers who operate gas fired electric generation facilities.
20 SCPC serves Progress Energy's gas fired generation stations at Robinson Plant in
21 Hartsville, Columbia Energy's generation facilities in Calhoun County, Duke

1 Power's generation at Buzzards' Roost in Greenwood County, and several gas-
2 fired peaking units owned by SCE&G.

3 **Q. ON WHAT TERMS DOES SCPC PROVIDE SERVICE TO ITS SALE FOR**
4 **RESALE CUSTOMERS?**

5 A. Historically, SCPC has served its sale for resale customers under contracts
6 that specify the daily quantities of gas that SCPC has committed to deliver on a
7 firm basis to meet the customer's peak winter demand. Customers pay a fixed
8 monthly demand charge for each dekatherm of this contract demand that they ask
9 SCPC to stand ready to serve.

10 Under these firm contracts, SCPC provides both the delivery of the gas and
11 the gas commodity itself as a single bundled service. To meet its merchant
12 obligation under these contracts, SCPC purchases gas supplies, and related
13 upstream transportation and storage services in interstate markets. SCPC then
14 uses these assets (and its own system) to deliver gas supplies to its customers.
15 Under the standard sale for resale contracts, customers pay for the gas they
16 consume based on the price SCPC has paid for that gas and the transportation and
17 storage charges related to that gas.

18 SCPC also provides these customers with interruptible service, which they
19 use principally to provide interruptible service to industrial customers located on
20 their systems. However, as a general matter, SCPC's service to its sale for resale
21 customers is characterized by firm service obligations for which customers pay a

1 fixed monthly demand charge. In his pre-filed direct testimony, Mr. Conard, who
2 is SCPC's Assistant Controller, provides a more detailed explanation of how these
3 contracts work and how SCPC computes and accounts for the charges under them.

4 **Q. PLEASE DISCUSS THE GROWTH OF FIRM DEMAND ON THE**
5 **COMPANY'S SYSTEM.**

6 A. In spite of extremely volatile gas prices over the past few years, firm
7 demand on our system has continued to grow. As shown on Exhibit No. ____
8 (SLD-1), firm contract demand on our system grew at an annual average rate of
9 8.1% during the period January 1, 1992 to December 31, 2005.

10 **Q. PLEASE DISCUSS SCPC'S DEMAND FOR FIRM SALES SERVICE IN**
11 **RELATION TO ITS AVAILABLE UPSTREAM TRANSPORTATION**
12 **CAPACITY AND LNG STORAGE RESOURCES.**

13 A. A comparison of SCPC's firm sales service to its available upstream
14 transportation capacity and LNG storage resources (Bushy Park and Salley) is
15 attached as Exhibit No. ____ (SLD-2). That exhibit indicates that we have firm
16 assets sufficient to provide a 2.54% operating reserve with a maximum duration of
17 16 days.

18 As stated earlier in my testimony, SCPC is sensitive to the fact that LNG
19 storage capacity is duration-limited. Further, the Company has experienced
20 growth in its firm load in recent years. Acquiring additional long-term interstate
21 capacity requires a significant amount of lead-time prior to the in-service date of

1 the new capacity, which must be factored into our planning. Therefore, we
2 continually evaluate the sufficiency of available capacity not only to serve current
3 demand needs, but to accommodate anticipated growth of demand for firm sales
4 service on the system.

5 **Q. EVEN THOUGH FIRM DEMAND HAS INCREASED OVER THE YEARS,**
6 **WHAT CLASS OF CUSTOMERS PROVIDES SCPC WITH ITS**
7 **PRINCIPAL SOURCE OF MARGIN REVENUE?**

8 A. SCPC's principal source of margin revenue (apart from the sale for resale
9 market) is its sales to interruptible industrial customers. While SCPC provides a
10 relatively small amount of firm service to direct industrial customers, the vast
11 amount of its service to industrial customers is interruptible service, and most of
12 this service is under a pricing program called the Interruptible Sales Program –
13 Rider or ISP-R.

14 **Q. PLEASE DESCRIBE THE COMPANY'S ISP-R PROGRAM.**

15 A. The ISP-R program is the principal mechanism that SCPC uses today to
16 retain competitive industrial loads. It was initially authorized in Order No. 83-222
17 and has been reviewed by the Office of Regulatory Staff and reaffirmed in every
18 annual PGA proceeding in the intervening 23 years. Moreover, the program has
19 been regularly reviewed by this Commission, and consistently upheld as beneficial
20 for the system and all its customers.

1 Further, the ISP-R allows SCPC to quote competitive gas prices to its
2 customers on a month-to-month basis to allow SCPC to compete with alternative
3 fuels. Under the ISP-R program, SCPC is allowed to allocate specific gas supply
4 purchases to these sales to meet competitive prices.

5 **Q. WHAT ARE THE BENEFITS OF THE ISP-R PROGRAM?**

6 A. During the review period, the ISP-R continued to provide a degree of
7 operational and cost stability for the firm market that cannot be met by any other
8 means. The ISP-R allows SCPC to maintain competitive sales to industrial
9 customers with alternative fuel sources by allocating available gas supplies to
10 them at prices that compete with their alternative fuels. Through this mechanism
11 SCPC is able to make sales to interruptible customers that otherwise might not be
12 made. The ISP-R also gives SCPC the flexibility to curtail the interruptible
13 customers to satisfy firm customer demands when necessary. This arrangement
14 promotes the more efficient use of SCPC's system and helps us recover a portion
15 of our fixed costs through industrial sales, costs that would otherwise be paid by
16 the firm customers.

17 In addition, by retaining service to interruptible customers through the ISP-
18 R, SCPC has more flexibility and can purchase larger volumes of gas supply each
19 month. Through the ISP-R program, SCPC is able to purchase supplies at the
20 beginning of the month for use by interruptible customers that may become
21 available to the firm customers as firm load increases with increasing cold

1 weather. When firm market demands increase significantly, SCPC's priority-of-
2 service curtailment plan allows SCPC to curtail the interruptible customers and
3 make lower-cost gas purchased earlier in the month available for immediate use by
4 the firm customers. In sum, as it is structured today, the ISP-R provides for
5 pricing flexibility, enhances system reliability, and contributes to system revenues
6 and price stability.

7 **Q. IN PRIOR PGA PROCEEDINGS, HAS THE COMMISSION**
8 **RECOGNIZED THAT THE ISP-R BENEFITS THE COMPANY'S**
9 **SYSTEM AND ITS CUSTOMERS?**

10 A. Yes. The Commission has found in every PGA order since 1983 that the
11 ISP-R program benefits SCPC's system and its firm customers by making it
12 possible for SCPC to compete effectively in industrial fuel markets. [See for
13 example Order 98-298 at 4; Order 99-712 at 4-5; Order 2000-0434 at 3-4; Order
14 2001-496 at 3; Order 2002-555A at 3]. In addition, as the Commission has found
15 on numerous occasions:

16 The ISP-R promotes the efficient use of SCPC's
17 facilities, helps to recover a portion of SCPC's fixed
18 costs through industrial sales, allows SCPC to exert
19 purchasing power in interruptible gas markets so that
20 natural gas is obtained at better terms and prices, and
21 provides additional flexibility and reliability to
22 SCPC's system.

23 [See Order 2002-555A at 3; *see also* Order 2001-496 at 3; Order 98-298 at 4; Order
24 99-712 at 4-5; and Order 2000-0434 at 3-4].
25

1 Furthermore, in Docket No. 2004-6-G, the Commission stated:

2 We find that the ISP-R provides a number of benefits to SCPC, its
3 system, and all its classes of customers, including the sale for resale
4 customers who conduct their own ISP-R. Specifically, the ISP-R
5 allows SCPC to:

- 6
- 7 a. Maintain service to industrial customers that
8 would otherwise be lost to the system;
 - 9
 - 10 b. Generate substantial margin revenue needed to
11 support the financial integrity of the system;
 - 12
 - 13 c. Create additional purchasing power and
14 operating flexibility by allowing SCPC to
15 purchase larger volumes of gas supply each
16 month; and
 - 17
 - 18 d. Maintain a substantial pool of gas purchased for
19 interruptible customers that can be used to serve
20 firm customers in times of tight supply.
 - 21

22 [See Commission Order No. 2004-510 at p.16].

23 Additionally, the Commission stated, “[m]ost importantly, however, the
24 ISP-R allows SCPC to earn margins from competitive industrial customers which
25 are used primarily to off-set a significant portion of SCPC’s fixed costs; costs that
26 would otherwise be paid by SCPC’s sale for resale customers.” [Id.]

27 **Q. PLEASE PROVIDE THE COMMISSION WITH AN UPDATE**
28 **REGARDING THE PENDING MERGER BETWEEN SCPC AND SCG.**

29 A. After our June 2004 public announcement of the intention to merge SCG
30 into SCPC to form a single interstate natural gas transportation company, we
31 began meeting with customers to discuss details of the merger plan. Confidential

1 settlement discussions resulted in a filing by SCG and SCPC on February 27, 2006
2 of an application requesting that the Federal Energy Regulatory Commission
3 (“FERC”) approve an offer of settlement negotiated with the customer group and
4 grant the authorizations necessary to permit the merger of SCG into SCPC to form
5 a single, integrated interstate pipeline operated under FERC jurisdiction and to be
6 called Carolina Gas Transmission Corporation (“Carolina Gas”). The application
7 requested that FERC grant the requested relief by July 31, 2006, so that Carolina
8 Gas can commence operations in advance of the 2006-2007 winter heating season.
9 SCPC is pleased to inform the Commission that none of SCPC’s existing
10 customers contested the settlement. In addition, on March 31, 2006, the South
11 Carolina Office of Regulatory Staff filed comments with FERC in support of the
12 proposed merger.

13 **Q. WHAT ARE YOU REQUESTING OF THE COMMISSION IN THIS**
14 **PROCEEDING?**

15 A. During the period under review, the Company has prudently managed its
16 business operations and appropriately recovered its gas costs and purchased its gas
17 supplies. Therefore, on behalf of SCPC, I respectfully request that the
18 Commission find that SCPC has recovered its gas costs for the period under
19 review consistent with its tariff and Commission orders and that it has purchased
20 its gas supplies in a prudent and reasonable manner.

1 With regard to the ISP-R, this program continues to provide substantial
2 benefits to all our customers and to the system in general. For the reasons stated
3 above, I respectfully request the Commission to continue the ISP-R program
4 without modification.

5 **Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?**

6 **A. Yes, it does.**

SOUTH CAROLINA PIPELINE CORPORATION

Firm Contract Demand Growth (Includes FT, RFT and RFTP contracts)

Year	Firm Contracts dts (000)	Yearly Rate of Growth
1992	260,250	0.68%
1993	262,017	11.98%
1994	293,399	-2.15%
1995	287,090	4.20%
1996	299,147	2.25%
1997	305,876	-0.27%
1998	305,051	13.38%
1999	345,879	1.89%
2000	352,422	2.33%
2001	360,637	0.04%
2002	360,772	2.44%
2003	369,557	22.68%
2004	453,384	17.84%
2005	534,252	

Average Yearly Rate of Growth 8.10%

South Carolina Pipeline Corporation
Comparison of Available Capacity and LNG to Firm Sales Service Demand (12-31-2005)

	Reserve Capacity		
	16 Winter Days (dts)	4 Additional Winter Days (dts)	Balance of Winter (dts)
SCPC Firm Interstate Capacity Contracts ⁽¹⁾	263,376	263,376	263,376
LNG - Bushy Park (Output 60 MMCFD) ⁽²⁾⁽³⁾	63,000	-	-
LNG - Salley (Output 45 MMCFD) ⁽²⁾⁽⁴⁾	48,272	48,272	-
Total Flowing Gas Supply (Including LNG)	374,648	311,648	263,376
SCPC Firm Sales Service Customers (@ 12/31/05) ⁽⁵⁾	365,368	365,368	365,368
Reserve dts	9,280	(53,720)	(101,992)
Reserve %	2.54%	-14.70%	-27.91%

Notes:

1. Does not include temporary and permanent releases of upstream firm capacity associated with customer's RFT contracts.
2. BTU value for Bushy Park and Salley were calculated at the 2005 rate.
3. 980 MMCF of Storage for Bushy Park.
4. 900 MMCF of Storage for Salley.
5. Does not include FT, RFT or RFTP contracts.

**DIRECT TESTIMONY OF
MICHAEL P. WINGO
ON BEHALF OF
SOUTH CAROLINA PIPELINE CORPORATION
DOCKET NO. 2006-6-G**

SCPC DOCKET NO. 2006-6-G
COMBUSTION
2006-11-17 PM 3:30
FILED

Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS, AND POSITION.

A. My name is Michael P. Wingo, and my business address is 105 New Way Road Columbia, South Carolina 29224. I am employed by South Carolina Pipeline Corporation ("SCPC") as General Manager – Gas Control & Operations Planning.

Q. PLEASE DESCRIBE YOUR EDUCATION AND BUSINESS BACKGROUND.

A. I have a Bachelor of Business degree in Marketing from Georgia State University. After graduating from college in 1976, I became employed by Atlanta Gas Light Company ("AGLC"). I held numerous positions during my tenure at AGLC, and in 1998, I became Vice President – Gas Supply for AGLC.

Q. WHEN WERE YOU HIRED BY SCANA AND IN WHAT CAPACITY?

A. In 2000, I joined SCANA Energy Marketing, Inc. in Georgia as Manager of Operations, and in 2001, I was promoted to General Manager – Gas Supply & Capacity Management, for SCANA Services Company, Inc. In December 2005, I assumed my current position of General Manager, Gas Control & Operations Planning for SCPC.

1 **Q. WHAT WERE YOUR DUTIES AS GENERAL MANAGER – GAS SUPPLY**
2 **& CAPACITY MANAGEMENT DURING THE REVIEW PERIOD?**

3 A. I was responsible for gas supply and capacity management functions.
4 Specifically, my responsibilities include forecasting and planning, procurement of
5 supply and capacity, nominations and scheduling, gas cost accounting, regulatory
6 issues both state and federal concerning supply and capacity issues, and structured
7 marketing and asset management.

8 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

9 A. The purpose of my testimony is to discuss SCPC's portfolio of gas supply
10 service options. I begin my testimony by discussing the various gas supply
11 options available to SCPC, and the gas supply options implemented by SCPC. I
12 then discuss the transportation and storage assets used by SCPC to provide natural
13 gas services to SCPC's firm customers. Next, I discuss the various types of
14 contracts available to SCPC in establishing its gas portfolio, which is then
15 followed with a discussion on SCPC's capacity release program. Finally, I
16 conclude my testimony by discussing the hurricane activity of last year and its
17 impact on supplies and prices going into the winter heating season of 2005 – 2006.

18 **Q. WHAT GAS SERVICE OPTIONS ARE AVAILABLE TO SCPC?**

19 A. There are four gas service options available to SCPC. The gas service
20 options are (1) wellhead gas supply; (2) underground storage; (3) pipeline
21 transportation; and (4) liquefied natural gas ("LNG"). These options are available
22 through the three interstate pipelines that connect to SCPC's system, two on which

1 SCPC holds firm transportation contracts as well as SCPC's on-system LNG
2 facilities.

3 **Q. PLEASE DESCRIBE SCPC'S GAS SUPPLY PORTFOLIO.**

4 A. SCPC's gas supply portfolio includes each service option discussed above,
5 and SCPC combines these services to meet its firm demand under varying weather
6 conditions at reasonable cost. At December 31, 2005, SCPC had fifteen (15) firm
7 wellhead contracts for a maximum daily quantity of 170,000 Dt per day. Spot
8 wellhead purchases are also made as required to meet system needs.

9 **Q. PLEASE DESCRIBE SCPC'S UPSTREAM FIRM TRANSPORTATION**
10 **CAPACITY CONTRACTS AS WELL AS ITS STORAGE CONTRACTS.**

11 A. At December 31, 2005, upstream firm transportation capacity contracts
12 totaled 287,714 Dt per day on the two (2) interstate pipelines that provide service
13 directly to SCPC: Southern Natural Gas Company ("Southern") and
14 Transcontinental Gas Pipe Line Corporation ("Transco"). Production area
15 underground storage contracts total 6,515,450 Dt of storage capacity. The
16 maximum injection and withdrawal quantity for these contracts total 47,295 Dt per
17 day and 124,978 Dt per day, respectively. Market area underground storage
18 contracts total 86,564 Dt of storage capacity and maximum injection and
19 withdrawal quantity of 506 Dt per day and 3,524 Dt per day, respectively. Exhibit
20 No. __ (MPW-1) provides a summary of the firm transportation and underground
21 storage maximum daily capacity by pipeline supplier.

1 SCPC's on-system LNG facilities have a total storage capacity of 1,880,000
2 Mcf. The maximum liquefaction rate for these LNG plants is 6,000 Mcf/day and
3 assuming the ability to achieve 100% nameplate capacity, the maximum
4 vaporization rate is 150,000 Mcf/day. While these facilities have the nameplate
5 capability to vaporize 150,000 Mcf/day, SCPC uses them to provide an LNG
6 peaking service with a planned vaporization of 105,000 Mcf/day.

7 **Q. PLEASE BRIEFLY DESCRIBE THE WELLHEAD GAS SUPPLY**
8 **OPTION.**

9 A. Natural gas wells generally produce natural gas at a constant rate year-
10 round, and SCPC possesses the ability to purchase a supply of natural gas directly
11 from the wellhead. After SCPC purchases a supply of wellhead gas, an interstate
12 pipeline company then transports the gas directly to SCPC's system. As will be
13 discussed more fully below, SCPC may purchase wellhead gas on a firm or spot
14 basis.

15 **Q. PLEASE BRIEFLY DESCRIBE THE UNDERGROUND STORAGE**
16 **OPTION.**

17 A. After purchase, some wellhead gas is stored in underground facilities
18 located nearer the wellheads or closer to the consumer markets. Depending upon
19 location, these underground facilities are referred to as either production area
20 storage or market area storage. Gas stored in these underground facilities can be
21 withdrawn and delivered to SCPC's system during periods of high demand.

1 Additionally, gas can be injected and withdrawn from these facilities in order to
2 “balance” the system on a daily basis.

3 Typically, underground storage facilities operate on an annual cycle.
4 During the summer months, the storage is filled, and in the winter months, the
5 storage is withdrawn.

6 Underground storage is withdrawn at a much faster rate than it can be
7 refilled. Additionally, as gas in storage decreases, the rate at which gas can be
8 withdrawn decreases. Further, as the quantity of gas in storage increases, it
9 becomes more difficult to inject gas into storage and the rate of injection
10 decreases. Accordingly, both injection and withdrawal quantities ratchet (the
11 reduced ability to withdraw or inject gas into storage) and decline with increasing
12 or decreasing storage inventory levels respectively.

13 **Q. WHERE DOES SCPC TYPICALLY STORE ITS GAS AFTER**
14 **PURCHASE?**

15 A. During the period under review and currently, SCPC maintains contract
16 storage with the interstate pipelines at the following facilities: Southern’s storage
17 located in Monroe County, Mississippi (Muldon Storage Field) and Bienville
18 Parrish, Louisiana (Bear Creek Storage Field); and Transco’s storage located in St.
19 Landry Parrish, Louisiana (Washington Storage Field); Covington County,
20 Mississippi (Eminence Storage Field); Potter & Clinton Counties, Pennsylvania
21 (Wharton/Leidy Storage Fields known as GSS); and Carlstadt County, New Jersey
22 (LNG Service facility). These storage assets allow the Company to flow

1 additional volumes of gas into SCPC's system when needed. They also allow
2 SCPC to balance wellhead supply with system load requirements, thereby
3 mitigating the potential for imbalance charges. In aggregate, as reflected on
4 Exhibit No. ____ (MPW-2), the Company subscribes to 6,602,014 million Dt of
5 interstate storage capacity.

6 **Q. WHAT INTERSTATE STORAGE ASSETS ARE AVAILABLE TO THE**
7 **COMPANY TO AID IN DELIVERING RELIABLE AND SECURE GAS**
8 **SERVICE TO SOUTH CAROLINA CUSTOMERS?**

9 A. Currently, the Company subscribes to 5,167,164 Dt of storage on
10 Southern's system, with maximum daily withdrawal capability from this storage
11 equaling 104,337 Dt per day at peak storage inventory and maximum daily
12 injection capability of 39,747 Dt per day. On Transco, SCPC subscribes to
13 1,434,850 Dt per day of storage, with a maximum withdrawal quantity of 24,165
14 Dt per day of which 20,641 Dt per day is delivered within firm transportation
15 service and 3,524 Dt per day is in addition to firm transportation service. The
16 maximum daily injection capability into Transco storage is 8,054 Dt per day.
17 Exhibit No. ____ (MPW-2) reflects total storage and withdrawal capacity in a table
18 format.

19 **Q. PLEASE DESCRIBE THE LNG OPTION.**

20 A. As Mr. Dozier stated in his direct testimony, SCPC has two LNG facilities,
21 one at Bushy Park near Charleston and the other at Salley, in Orangeburg County.
22 The Bushy Park facility can liquefy and store up to 980,000 Mcf of LNG, while

1 Salley can store up to 900,000 Mcf of trucked-in LNG. Salley has no liquefaction
2 facilities. Exhibit No. ____ (MPW-2) attached hereto sets forth the operational
3 capacity of intrastate LNG storage at Bushy Park and Salley, and shows the
4 combined capacity of these LNG facilities.

5 SCPC's intrastate LNG storage provides service from facilities directly
6 connected to the Company's system and is normally used for needle peak demand,
7 which is the last increment of demand on the coldest hours or days of the winter.
8 This on-system LNG service significantly adds to the reliability and security of
9 gas supply during unfavorable operating conditions that may occur from time to
10 time. For example, SCPC's supply of gas could be unexpectedly interrupted
11 because of a hurricane in the Gulf, or because abnormally cold weather creates a
12 spike in demand which in turn causes equipment malfunctions, well freeze-ups,
13 and other operational abnormalities thereby limiting the supply of gas into South
14 Carolina. In these instances, SCPC could employ the use of its on-system LNG
15 facilities for a limited time to offset any adverse effects caused by an upstream
16 interruption.

17 **Q. WHY DOES SCPC FIND IT NECESSARY TO STORE GAS FOR LATER**
18 **USE?**

19 A. The storage of natural gas is both a beneficial and critical function to the
20 operation of SCPC's gas transmission system. Storage primarily serves as an
21 available supplement of gas to SCPC's existing wintertime wellhead gas supplies.
22 However, storage also serves other useful purposes. For example, storage

1 provides added reliability to the system in the event a disruption occurs in SCPC's
2 wellhead supplies. Moreover, SCPC's on-system LNG storage provides an added
3 measure of reliability for interstate capacity disruptions because interstate pipeline
4 outages have no effect upon LNG storage.

5 Storage also allows SCPC to "balance" daily differences between the
6 quantities of wellhead gas purchased and the quantities of wellhead gas consumed
7 by SCPC's customers. Additionally, because wellhead gas purchases seldom
8 match a customer's usage from one day to the next, storage acts as a supplement to
9 wellhead gas purchases in the event a customer's daily consumption of gas
10 exceeds SCPC's wellhead gas purchases for that day. Conversely, storage absorbs
11 any unused wellhead gas purchases in the event a customer uses less gas than
12 actual wellhead gas purchases.

13 Finally, in some instances, storage provides a price benefit to SCPC and its
14 customers. For example, by storing gas during summer months when natural gas
15 prices are usually at their lowest, SCPC is able to reduce the quantity of wellhead
16 gas purchases required during the winter when wellhead gas prices are
17 traditionally at their highest due to high demand.

18 **Q. HOW DOES SCPC UTILIZE ITS COMBINED INTERSTATE STORAGE**
19 **AND INTRASTATE LNG TO ASSURE RELIABLE AND SECURE GAS**
20 **SERVICE?**

21 A. There are two dimensions to storage services: peak capability and duration.
22 SCPC uses its storage to address both of these dimensions. Certain storage

1 services are geared toward providing large withdrawal quantities to meet spikes in
2 demand on very cold days but only for a short period of time. The storage
3 services in SCPC's portfolio of this type include Transco LNG, Transco ESS and
4 both the Bushy Park and Salley LNG facilities located on SCPC's system.
5 Accordingly, these storage services provide SCPC with peak capability.

6 Other storage services are geared toward meeting demand over more of the
7 winter period and not only on the coldest days. The storage services in SCPC's
8 portfolio of this type include Transco WSS, Transco GSS and Southern's CSS.
9 Therefore, these storage services provide SCPC with duration capability. Through
10 the active management of all these assets, SCPC is able to meet the needs of its
11 firm customers on the coldest days of the winter and over the entire winter.

12 **Q. PLEASE DESCRIBE THE AVAILABLE INTERSTATE PIPELINE**
13 **TRANSPORTATION OPTION.**

14 A. SCPC contracts for interstate pipeline transportation capacity on both a firm
15 and interruptible basis.

16 Interstate Firm Transportation ("FT") service permits the customer access
17 to the interstate pipeline transportation capacity on a priority basis. On the other
18 hand, interstate Interruptible Transportation ("IT") service is only available when
19 pipeline FT customers, such as SCPC, are not using their FT capacity. IT service
20 is curtailed when FT customers use their capacity. In other words, FT and IT
21 services use the same physical pipeline capacity, with FT service having priority.

1 SCPC contracts for FT service from the pipelines to assure delivery of natural gas
2 during colder periods when the full transportation capacity of the pipeline is used.

3 The FT service contract demand volume, which provides priority to the
4 interstate pipeline capacity, determines the fixed cost of gas transportation service
5 to SCPC under the interstate pipeline company's rates filed with and approved by
6 the Federal Energy Regulatory Commission. This fixed cost is paid every month
7 regardless of the quantity of gas actually transported by SCPC. Additionally, the
8 interstate pipeline companies have a variable charge associated with each Dt of
9 gas transported by them on behalf of SCPC. This cost increases or decreases
10 monthly depending upon usage.

11 **Q. PLEASE DESCRIBE THE CONSIDERATIONS EVALUATED BY SCPC**
12 **IN ASSEMBLING ITS GAS SUPPLY PORTFOLIO.**

13 A. The Company begins its evaluation by reviewing the gas supply, storage,
14 transportation, and other assets already under contract. Other considerations
15 include such things as geographical delivery limitations, maximum volumes,
16 storage ratchets, must-take volumes, and the cost of the various services. SCPC
17 then compares the resources to the varying weather conditions. Finally, the
18 Company determines whether additional resources are required under the varying
19 weather conditions.

1 **Q. PLEASE DESCRIBE THE PROPOSED USE OF EACH OF THESE**
2 **VARIOUS SERVICES WITHIN THE PORTFOLIO.**

3 A. SCPC places different levels of reliance on its various supply sources based
4 on the time of year in question. In the early part of the winter, SCPC seeks to use
5 its wellhead gas as its principal supply. To the extent that wellhead gas is not
6 sufficient, SCPC then uses the natural gas stored in underground storage facilities
7 in descending order of the duration of their supply capability. Lastly, SCPC uses
8 on-system LNG to meet the last increment of demand on the coldest days or hours
9 of the year.

10 As the winter progresses, this order of usage may be modified under certain
11 circumstances to take advantage of economic opportunities. For example, if South
12 Carolina experiences mild weather during the early part of the winter and storage
13 inventories are relatively high, then underground storage and LNG withdrawals
14 may be used instead of wellhead supply.

15 **Q. WOULD YOU ELABORATE FURTHER ON VARIOUS WEATHER**
16 **CONDITIONS CONSIDERED IN THE PLANNING PROCESS?**

17 A. Yes. Winter weather in South Carolina is highly volatile. Temperatures
18 may range from unseasonably warm to frigid cold in a very short period. In
19 addition, weather in a winter month such as January may change dramatically
20 from year to year. Exhibit No. ____ (MPW-3) provides the actual heating degree
21 days for the Columbia area for each January from 1956 through 2006.
22

1 **Q. BRIEFLY DESCRIBE A HEATING DEGREE DAY.**

2 A. Heating degree day is an industry accepted measure of the potential heating
3 demands that weather conditions create. Simply stated, a heating degree day is a
4 comparative measure of cold weather.

5 In order to calculate the number of heating degree days experienced in a
6 twenty-four (24) hour period, simply subtract the average temperature for a
7 twenty-four (24) hour period from sixty-five (65) degrees Fahrenheit.
8 Accordingly, the result of this calculation is the total number of heating degree
9 days experienced during that particular twenty-four (24) hour period. The greater
10 the number of heating degree days experienced, the colder the weather during that
11 period.

12 **Q. HOW DOES THIS TYPE OF WEATHER VARIATION AFFECT GAS**
13 **SUPPLY REQUIREMENTS?**

14 A. The volatility of winter weather in South Carolina requires SCPC to
15 maintain a flexible gas services portfolio. The portfolio must be capable of
16 meeting both large swings in firm demand from day to day within the winter
17 season, and swings over a winter season, which can range from warmer than
18 normal to colder than normal.

19 **Q. PLEASE DESCRIBE SCPC'S WELLHEAD GAS SUPPLY CONTRACTS.**

20 A. SCPC has entered into firm long-term contracts for gas supply at the
21 wellhead with various producers and marketers. At December 31, 2005, SCPC
22 had fifteen firm wellhead supply arrangements under contract or under

1 negotiation. The contracts are for varying amounts of flowing gas and expiration
2 dates corresponding to the end of this winter period. The prices under most of
3 SCPC's contracts are based on monthly spot prices; however, SCPC has the option
4 to negotiate a monthly price using various benchmark prices. The commodity
5 price represents the value of spot gas in the market and the reservation fee is based
6 on the length of the firm supply commitment and the take flexibility. The volumes
7 under contract represent purchases from major oil and gas producers, independent
8 producers, and marketers. During the review period, SCPC utilized three types of
9 firm supply contracts: baseload, take-or-release and daily flexibility.

10 **Q. PLEASE DESCRIBE A FIRM BASELOAD CONTRACT.**

11 A. A baseload contract is the least flexible supply contract. Under this
12 contract, the supplier has an obligation to furnish gas and SCPC has an obligation
13 to purchase the contract quantity every day for the term of the contract. Suppliers
14 like these type contracts because they best match the operating characteristics of
15 gas wells which produce gas at relatively consistent levels and do not require
16 much management of the supply source.

17 **Q. PLEASE DESCRIBE FIRM CONTRACTS WITH TAKE-OR-RELEASE**
18 **FLEXIBILITY.**

19 A. Take-or-Release flexibility allows SCPC to know that it has a firm supply
20 of gas across the winter period much like baseload gas contracts but also provides
21 the additional right to not take gas for the month. As an example, a Take-or-
22 Release contract for 10,000 Dts for the period November to March would allow

1 the Buyer to exercise the right to “take” 10,000 Dts for November and for
2 December to “take” 8,000 Dts and “release” the remaining 2,000 back to the
3 supplier and in March to “release” the entire 10,000 Dts back to the supplier.

4 **Q. PLEASE DESCRIBE FIRM CONTRACTS WITH DAILY FLEXIBILITY.**

5 A. Daily flexibility allows SCPC to nominate for delivery a quantity of gas
6 between zero and the daily contract maximum each day. This type of contract
7 allows SCPC to respond to both increases and decreases in demand within the
8 same delivery month. These types of contracts require more management by the
9 supplier again because gas wells produce at relatively consistent levels.

10 **Q. ARE THERE OTHER TERMS ASSOCIATED WITH FIRM GAS SUPPLY**
11 **CONTRACTS?**

12 A. Yes. Beyond take flexibility provisions as described above, gas supply
13 contracts typically include performance standards, penalty provisions, reservation
14 fees, and other miscellaneous terms. Each provision affects the value of the
15 contract in the portfolio.

16 **Q. PLEASE DESCRIBE A SPOT PURCHASE.**

17 A. In a spot purchase, the buyer agrees to buy and the seller agrees to sell on a
18 best effort basis. Generally, if the buyer and seller agree on a volume and price,
19 the sale is effective for a specific period, unless either party chooses to end the
20 arrangement.

1 **Q. DOES SCPC MAKE SPOT GAS PURCHASES AS PART OF ITS**
2 **PORTFOLIO?**

3 A. Yes. SCPC has the ability to purchase spot gas from approximately sixty-
4 eight (68) different suppliers.

5 **Q. BRIEFLY DESCRIBE CAPACITY RELEASE.**

6 A. Southern and Transco offer capacity release through which SCPC possesses
7 the ability to resell all or part of its idle firm transportation capacity to any entity
8 who wants to obtain that capacity by contracting with Southern or Transco.

9 **Q. PLEASE DESCRIBE CAPACITY RELEASE AVAILABLE UNDER FERC**
10 **PROCEDURES.**

11 A. The capacity release market permits SCPC to buy or sell firm interstate
12 pipeline transportation capacity through the interstate pipelines' capacity release
13 bulletin boards. The capacity release mechanism creates an open, competitive
14 market for selling capacity. Shippers acquiring released capacity are billed by and
15 make payments directly to the interstate pipeline for the capacity released. The
16 interstate pipeline then credits SCPC's transportation invoice in the amount of the
17 capacity release payments.

18 **Q. WHAT DETERMINES AVAILABLE CAPACITY RELEASE?**

19 A. The availability of capacity release is influenced by many factors such as
20 the weather and market conditions. If weather is colder than normal, firm supply
21 services will consume more of the portfolio and limit capacity available for
22 capacity release transactions because SCPC's portfolio is assembled to meet the

1 firm demand of its customers. If a cold winter were to occur, SCPC would use
2 essentially all of its firm supply services and then purchase additional quantities of
3 spot gas to meet firm demand. As a result, capacity release credits will necessarily
4 lag as those assets are used to serve native load due to the colder weather.

5 **Q. UNDER WHAT CONDITIONS WILL SCPC RELEASE CAPACITY?**

6 A. SCPC may release capacity when it is not required to meet system supply
7 needs. The level of the credits resulting from capacity release depends
8 significantly on the market for, the duration of, and conditions placed on the
9 released capacity. SCPC's strategy is to balance the benefits of the revenue
10 contributions from capacity release with SCPC's need to preserve flexibility and
11 reliability to meet system sales requirements. Furthermore, as discussed by Mr.
12 Conard in his direct testimony, credits associated with released firm capacity are
13 included in the monthly weighted average cost of gas ("WACOG").

14 **Q. PLEASE EXPLAIN THE IMPACT THAT HURRICANES KATRINA AND**
15 **RITA HAD UPON GAS SUPPLIES IN THE GULF OF MEXICO.**

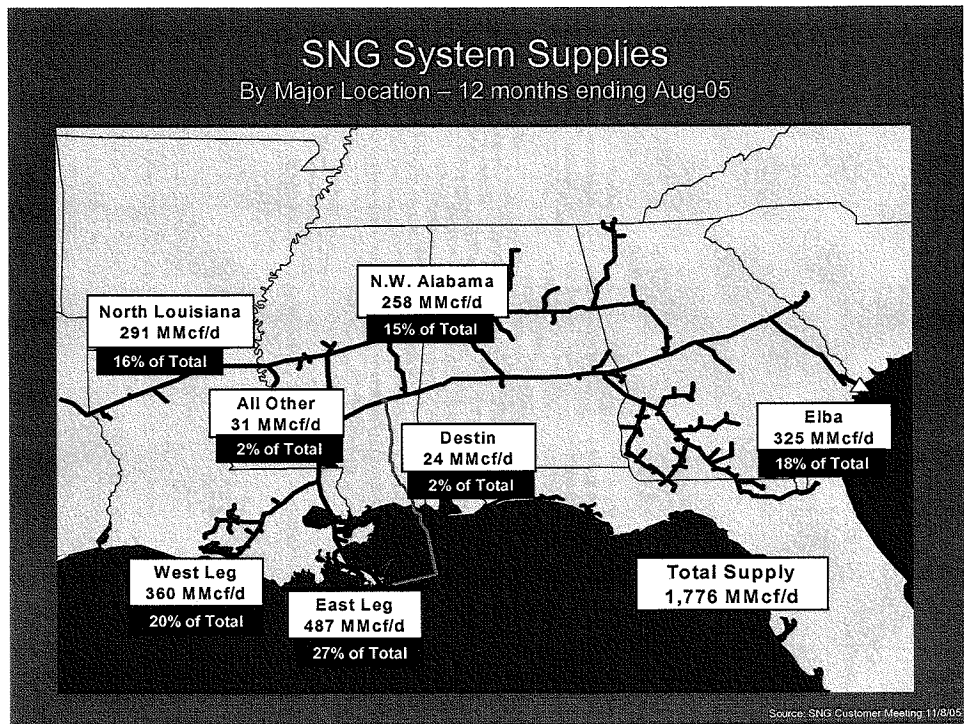
16 A. Hurricane Katrina struck the southern United States Gulf Coast on August
17 29, 2005, followed by Hurricane Rita on September 24, 2005. Both storms
18 severely damaged one of our nation's most critical production areas and, as a
19 result, caused major disruption in natural gas supplies.

20 Hurricane Katrina's path centered in the middle of the Gulf production area
21 and was massive enough to stretch eastward to affect supplies coming up from the
22 Gulf through Mobile Bay, Alabama and as far west as eastern Texas. Southern,

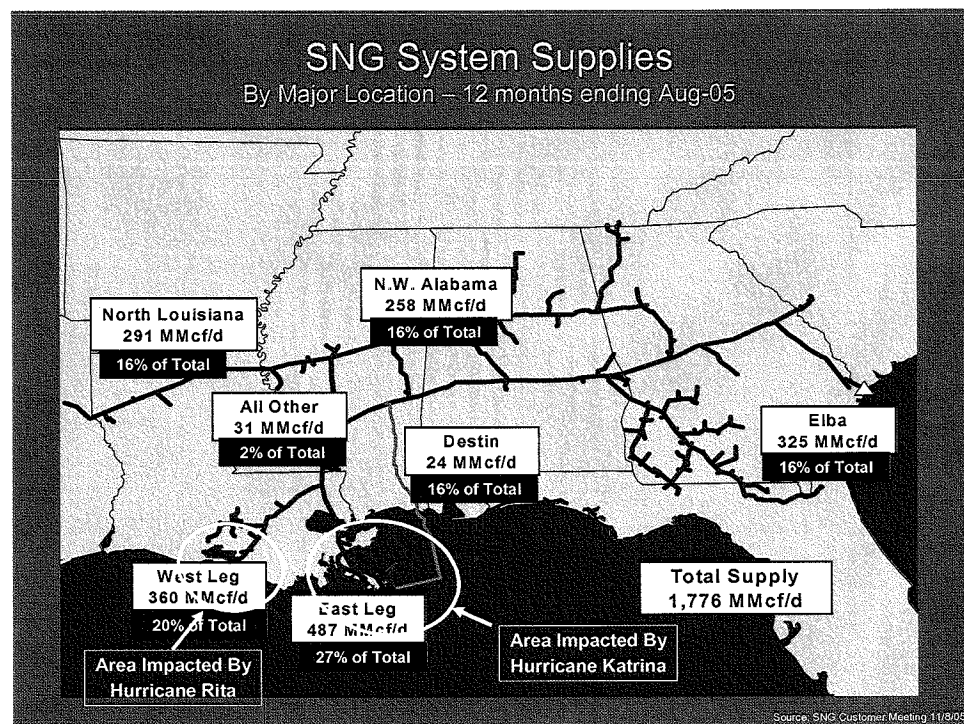
1 which has the bulk of its producers' supplies centered in the Louisiana gulf coast
2 area and provides approximately two thirds of the pipeline capacity that serves
3 South Carolina, had its supply severely limited from the production area of the
4 Gulf.

5 Hurricane Rita's path tracked a little farther to the west of Katrina and
6 impacted another major supply area of Southern's system. On November 8, 2005,
7 Southern provided a supply update on the storm damage and its impact on supplies
8 for the upcoming winter period. The following illustrations demonstrate the
9 impact that Hurricanes Katrina and Rita had upon gas supplies on Southern's and
10 Transco's systems.

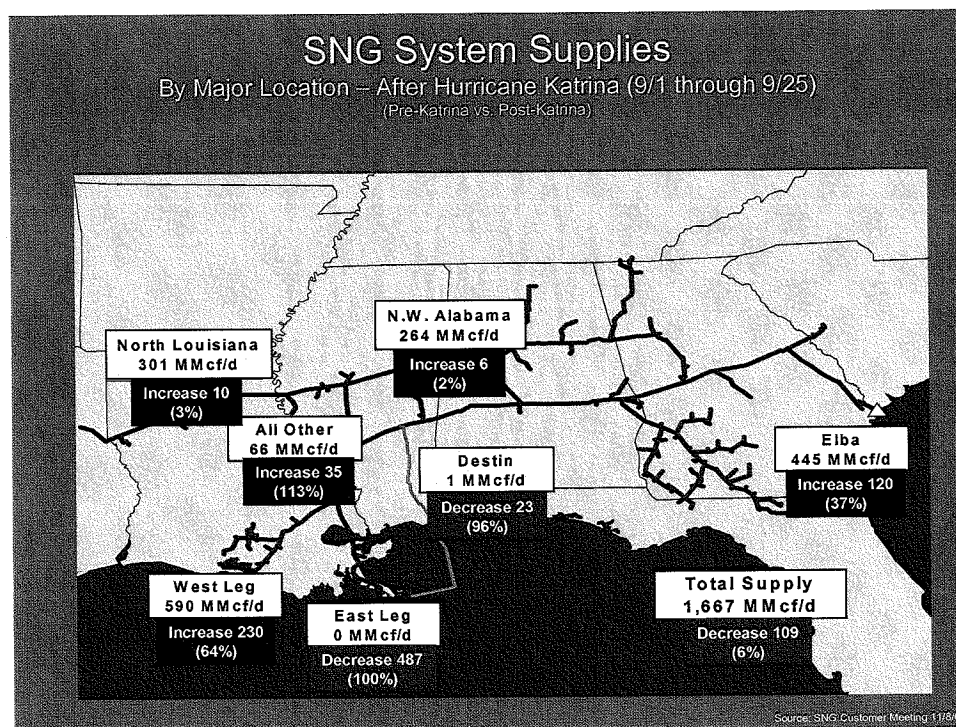
11 The graphic below shows the quantity and location of supplies on
12 Southern's system for the twelve months ending August 2005. Almost half of
13 Southern's total gas supply is located at Southern's East Leg and West Leg.



The next graphic overlays Hurricanes Katrina's and Rita's path over Southern's August 2005 ending supply locations and quantities.



The next graphic shows the quantity and location of supplies on Southern's system between September 1 and September 25, 2005, approximately one month after Hurricane Katrina, and reflects the increased or decreased availability in supply based on the August 2005 ending figures above. As you can see, Southern's East Leg supply was completely lost due to Katrina's direct hit on this area and virtually all of the Destin supply was lost. These two areas together represented 43% of Southern's supply. Fortunately, other supply areas were able to backfill for these losses. The backfill primarily came from two main supply areas, Southern's West Leg supplies and Elba Island. Southern's ability to backfill through diversity of supplies minimized the impact to a loss of 6% of the gas that was available before Hurricane Katrina.

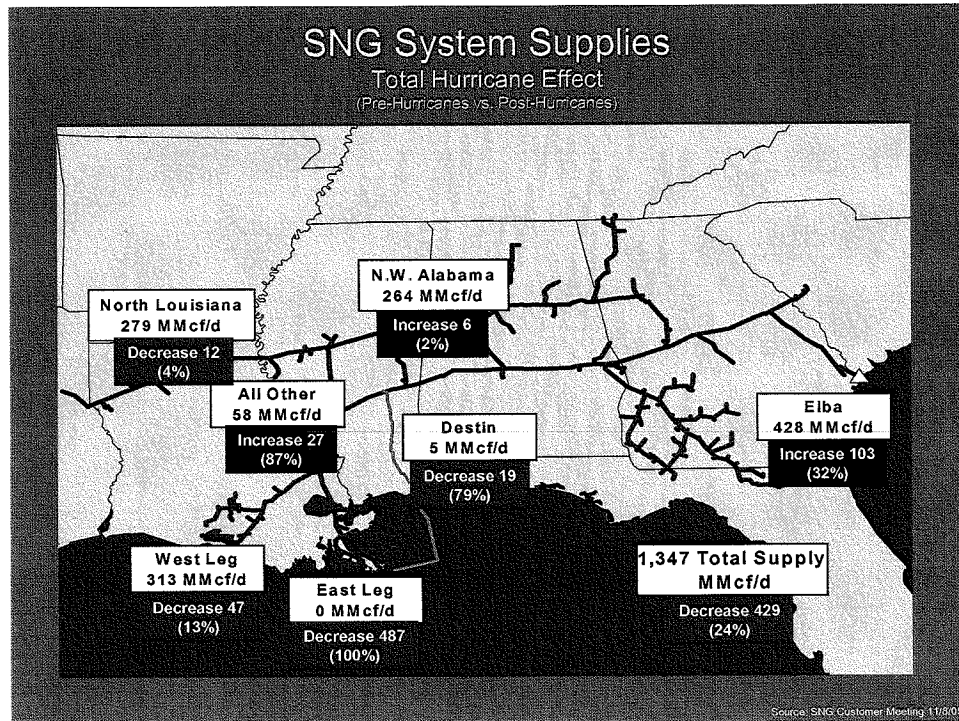


1 The next graphic shows the quantity and location of supplies on Southern's
2 system between September 22 and September 30, 2005, after Hurricane Rita and
3 reflects the increased or decreased availability in supply based on the August 2005
4 ending figures above. In the same manner that Hurricane Katrina made a direct hit
5 on Southern's East Leg supply area, Hurricane Rita made a direct hit on
6 Southern's West Leg supply area. The effect from Rita cut supply from the West
7 Leg almost in half plus reduced all other supply areas with the exception of a
8 minimal increase from Destin supply.



9
10
11 The final Southern graphic shows the impact of both hurricanes to
12 Southern's supplies comparing supplies before and after the hurricanes.

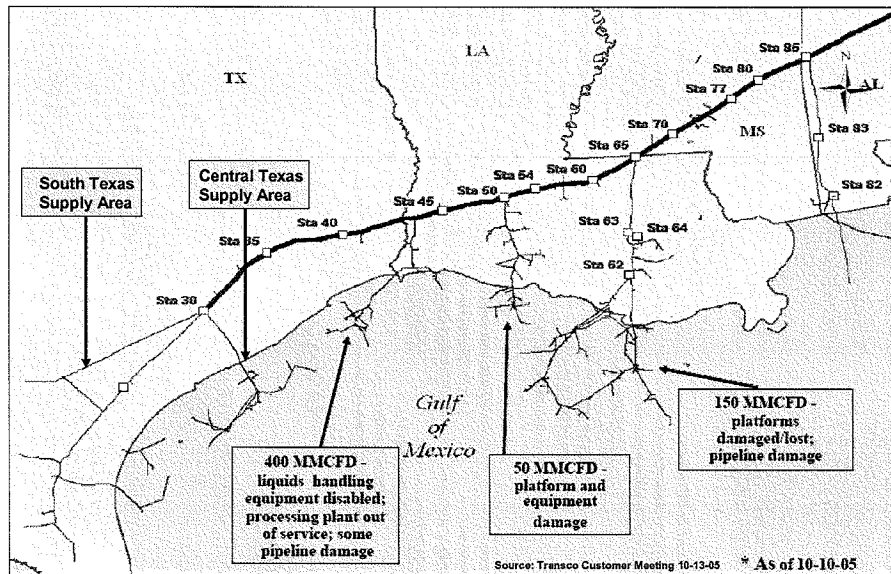
1 Southern's two most prolific supply areas were damaged, with Elba Island
2 providing the most sustained backstop gas for these outages.



3
4
5 Transco provides the remaining one third of the firm interstate capacity to
6 South Carolina. Transco reported at their October 13, 2005 Customer Meeting
7 that the hurricanes' impact on their system affected supplies cumulatively in the
8 amount of 600,000 Mmcf per day as of October 10. However, unlike Southern,
9 Transco has additional supply diversity through receiving supplies from the south
10 and central Texas supply areas which were not as heavily affected by Katrina or
11 Rita as shown in the following graphic.

1

Hurricane Impact On Transco Supply *



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Transco's outlook going into the winter season of 2005 – 2006 is summarized in the following graphic stating that: 1) firm capacity service levels would be available; 2) supplies impacted by the hurricanes would return over the winter period; 3) return to service of hurricane impacted gas processing plants was indeterminate (as of October 10); and 4) gas quality standards would be monitored closely to make as much supply available as possible without compromising the merchantability of the gas stream. In other words, unprocessed gas will be used as a result of the processing plant outages until it presents problems in the market and then such gas will be shut-in.

1

Transco Winter Supply Outlook

- Full firm service levels available
- Supply should ramp up through winter
- Uncertain as to timing of processing plants return to service
 - ♦ Cameron Meadows affects gas quality for up to 450 MMcf of Transco attached supply
 - ♦ Other plants affect pipeline interconnect supply
- Merchantability will be monitored closely
 - ♦ Blending as much as possible
 - ♦ Shut in out of spec supply as last resort

8

Source: Transco Customer Meeting 10-13-05

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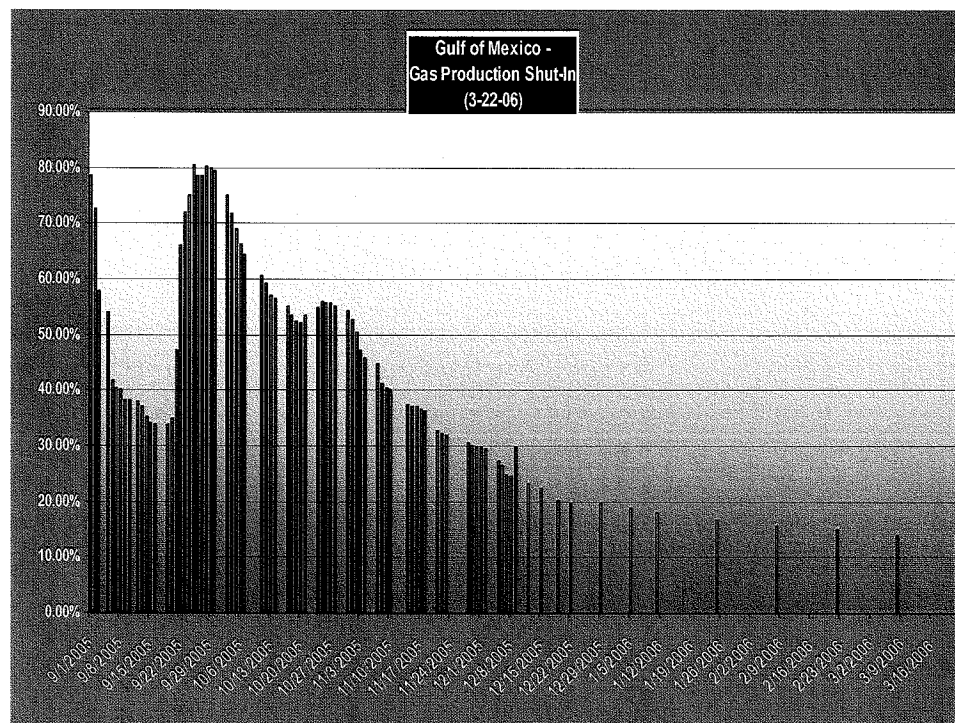
11

12

Fortunately, firm customer demand in September and October is traditionally low as gas is used by firm residential and commercial customers primarily for water heating and cooking rather than space heating. However, interruptible industrial customers were adversely impacted due to price and availability of gas. Many of these customers have the ability to switch to an alternate fuel source, generally oil. However, the oil supplies and oil pipeline infrastructure were also damaged by Katrina and Rita. As a result, many of these interruptible customers were concerned and had difficulty finding replacement oil to replenish their alternative fuel supplies as they were consumed.

1 Q. WHAT ARE THE DAMAGES TO THE COUNTRY'S NATURAL GAS
2 INFRASTRUCTURE RESULTING FROM HURRICANES KATRINA AND
3 RITA?

4 A. As indicated in the following graphic, the Minerals Management Service
5 reports showed approximately 88% of the wellhead gas supplies normally flowing
6 were unavailable at the height of the disruptions and that figure is down to
7 approximately 14% as of March 22, 2006, with progress over the last three months
8 making much smaller gains in available supplies than in the first four months
9 following these hurricanes.



10
11
12 Various combinations of damage limited supply available to the market. In some
13 cases supply was ready and pipeline damage prevented that supply from moving.

1 In other instances, pipelines were intact but the wells were damaged and unable to
2 make supply available into the pipelines. In other cases, as noted above in
3 Transco's customer update from last October, some gas processing plants were out
4 of commission which impacted the quality and, potentially, the quantity, of
5 flowing gas. Some compressor stations which keep the gas moving on interstate
6 pipelines were damaged and not operating. In the case of Southern, two major
7 compressor stations, Toca and Olga, were damaged restricting supplies movement
8 from the East Leg of their system.

9 As previously mentioned, because firm demand requirements in September
10 and October are relatively low, storage supplies were used to replace wellhead
11 supplies disrupted by the hurricane.

12 In addition to its impact on gas supplies, it is instructive to observe how
13 Hurricane Katrina impacted market prices. Thus, the five dates below show
14 market prices one month before Hurricane Katrina struck (July 29, 2005), and one,
15 three, five and seven months after Hurricane Rita struck September 29, 2005,
16 November 29, 2005, January 30, 2006 and March 29, 2006 respectively. These
17 figures show prices reflecting the weighted average price for the next five winters
18 based on normal winter consumption distribution.

1

	<u>7/29/05</u>	<u>9/29/05</u>	<u>11/29/05</u>	<u>1/30/06</u>	<u>3/29/06</u>
Winter 2005 - 2006	9.136	14.670	11.844	10.446	10.018
Winter 2006 - 2007	8.775	11.812	11.190	11.770	10.735
Winter 2007 - 2008	8.310	10.318	10.056	11.169	10.688
Winter 2008 - 2009	7.960	9.200	9.127	10.449	9.987
Winter 2009 - 2010	7.644	8.335	8.432	9.789	9.272

* Prices represent NYMEX prices for the indicated date reflecting closing prices for contracts being actively traded or the settle price for previously expired contracts.

2

3 **Q. WHAT REQUEST DO YOU HAVE OF THE COMMISSION IN THIS**
4 **PROCEEDING?**

5 A. In the face of the extraordinary impacts resulting from the hurricane
6 damage prior to the beginning of this past winter heating season and the measures
7 taken by the Company and this Commission to mitigate those impacts to the
8 Company's customers, I would ask the Commission to recognize the following
9 facts. During the period under review, SCPC contracted for sufficient supplies of
10 natural gas and provided reliable service to its customers. At no time during the
11 period under review was SCPC forced to curtail gas service to any of its firm
12 service customers. SCPC adequately maintained gas, storage, and transportation
13 assets for its system during the period under review at levels that were prudent and
14 reasonably met the reliability and service needs of the system. Therefore, I
15 respectfully request that the Commission find SCPC's cost for gas purchases and
16 asset management were reasonable and prudent for the period under review.

17

1 **Q. DOES THIS CONCLUDE YOUR PREFILED DIRECT TESTIMONY?**

2 **A. Yes.**

South Carolina Pipeline Corporation
Existing Firm Transportation and Storage Contracts

		Maximum Firm Transportation Dt/Day	Production Area Storage Maximum Withdrawal Dt/Day	Market Area Storage Maximum Withdrawal Dt/Day	Expiration Date
Southern	FSNG214-1 FT	44,650			October 31, 2010
	FSNG214-2 FT	22,684			October 31, 2010
	FSNG214-3 FT	5,105			October 31, 2010
	FSNG214-4 FTNN FT	84,521			October 31, 2010
		34,988	102,100		October 31, 2010
	CSS		2,237		October 31, 2010
Transco					
	.3704 Z1 - Z5	5,155			December 31 2008
	.3704 Z2 - Z5	7,582			December 31 2008
	.3704 Z3 - Z5	5,762			December 31 2008
	.3704 Z3 - Z5	11,827			December 31 2008
	2.0764 Station 65 (Sunbelt)	55,977			October 31, 2017
	2.0764 Station 85 (Sunbelt)	9,463			October 31, 2017
			15,221		March 31, 2006
			5,420		October 31, 2013
				791	March 31 2013
Company Owned LNG				663	See Note 1
				2,070	October 31, 2016
				153,150	
	Totals	287,714	124,978	156,674	

Note 1: Service is being provided under NGA authority

INTERSTATE STORAGE AND LNG STORAGE

I. Interstate Storage

Pipeline	Type	MSQ	MDWQ
Southern	CSS	5,167,164	104,337
Transco	ESS	54,536	5,420
Transco	GSS	43,409	791
Transco	GSS	32,805	663
Transco	WSS	1,293,750	15,221
Transco	LNG	10,350	2,070
Total Transco		1,434,850	24,165
Total Interstate		6,602,014	128,502

II. SCPC On-System LNG (in mcf) SCPC

LNGS	1,880,000	150,000
------	-----------	---------

Note: All values are stated in Dt, unless otherwise noted

ACTUAL COLUMBIA HEATING DEGREE DAYS

YEAR	JANUARY
1956-57	531
1957-58	766
1958-59	630
1959-60	603
1960-61	728
1961-62	620
1962-63	726
1963-64	640
1964-66	592
1965-66	759
1966-67	554
1967-68	732
1968-69	683
1969-70	823
1970-71	602
1971-72	429
1972-73	618
1973-74	199
1974-75	417
1975-76	662
1976-77	901
1977-78	850
1978-79	664
1979-80	641
1980-81	809

YEAR	JANUARY
1981-82	748
1982-83	739
1983-84	717
1984-85	792
1985-86	731
1986-87	657
1987-88	780
1988-89	469
1989-90	393
1990-91	571
1991-92	574
1992-93	509
1993-94	687
1994-95	596
1995-96	655
1996-97	567
1997-98	512
1998-99	485
1999-00	672
2000-01	645
2001-02	537
2002-03	700
2003-04	661
2004-05	514
2005-06	433

Average	630
Minimum	199
Maximum	901
Last 30 Years	640

**DIRECT TESTIMONY OF
JOHN S. BEIER
ON BEHALF OF
SOUTH CAROLINA PIPELINE CORPORATION
DOCKET NO. 2006-6-G**

RECEIVED
2006 MAY -1 PM 4:37
SC PUBLIC UTILITY
COMMISSION

Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS AND POSITION.

A. My name is John S. Beier. My office is located at 1426 Main Street, Columbia, South Carolina, and I am the Gas Analyst responsible for the administration of the hedging program of South Carolina Pipeline Corporation ("SCPC" or "Company").

Q. PLEASE DESCRIBE YOUR EDUCATIONAL AND BUSINESS BACKGROUND.

A. I am a 1992 graduate of the University of South Carolina, where I received a Bachelor of Science Degree in Accounting. Following graduation, I worked for a year and a half in public accounting with the CPA firm C.C. McGregor and Company. I have successfully completed the CPA exam and the work requirements necessary to become a licensed Certified Public Accountant in the State of South Carolina. I am currently a member of the American Institute of Certified Public Accountants and the South Carolina Association of Certified Public Accountants.

In January 1994, I joined SCANA Energy Marketing's Financial Accounting Department. The following fall I began working with SCANA Energy Marketing's Director of Risk Management in hedging the natural gas reserves for SCANA's unregulated oil and gas subsidiary. In the summer of 1995 I accepted the position of Risk Management Analyst for SCPC and conducted the Company's hedging

1 program until December 1999. Over the next four (4) years I served as Supervisor
2 of Gas Accounting and Regulatory for SCPC, and in 2003, I moved to my current
3 position – Gas Analyst.

4 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

5 A. The purpose of my testimony is to discuss with the Public Service
6 Commission of South Carolina (“Commission”) SCPC’s hedging program, including
7 the program’s objectives and results.

8 **Q. PLEASE EXPLAIN THE HEDGING PROGRAM AS IMPLEMENTED BY**
9 **SCPC.**

10 A. In order to explain hedging fully it is necessary to first discuss the market in
11 which SCPC competes for its natural gas supplies. Today, the natural gas market is
12 an unregulated, open market that is both dynamic and extremely volatile. Because
13 natural gas is an unregulated commodity, the forces of supply and demand largely
14 determine natural gas prices; therefore, natural gas prices can rise and fall rapidly
15 without much notice to gas buyers, such as SCPC.

16 To illustrate the volatility of natural gas prices, it is helpful to review the
17 range of gas prices that the market experienced during the 1996 – 2001 time period.
18 From 1996 through the early months of 2000, natural gas prices, though volatile,
19 had remained within a range roughly between \$1.80 and \$3.87 per dekatherm
20 (“Dt”). Prices only rarely went above or below that band, and then not by very
21 much or for very long. Beginning in the Spring of 2000, however, prices began to
22 climb. They broke the \$4.00 per Dt threshold around June of 2000 and kept

1 climbing. During the 2000 – 2001 Winter, spot gas prices peaked at over \$10.00
2 per Dt during the last days of December 2000 and early days of January 2001, and
3 these spot prices stayed above \$4.50 per Dt through April of 2001.

4 A survey of the market's activity shows that natural gas prices are as
5 volatile today as they were during the 2000-2001 time period. Since December
6 2002, natural gas prices have risen and fallen dramatically trading anywhere
7 between \$4.50 to nearly \$16.00 per Dt, and this trend of rising and falling prices
8 continued into and during the period under review. For example, natural gas
9 prices began 2004 at approximately \$4.90 per Dt, and by the end of January
10 climbed to \$7.63, which was followed by a retreat to \$5.06 in February 2004. By
11 May, they rose to \$6.84 per Dt, and in September 2004, natural gas prices fell
12 again reaching a low for the year at \$4.52 per Dt. One month later, however,
13 natural gas prices peaked for the year at \$9.20 per Dt.

14 For the period under review, prices began at \$5.79 and moved higher,
15 reaching \$7.904 by April 4. From there, prices dropped to \$6.03 by May 26.
16 Shortly after that point, Summer started heating up and a record-breaking
17 hurricane season soon followed. Exhibit ____ (JSB-1) is a chart that begins at
18 approximately this point and details the affect on prices of heat boosting demand
19 and tropical storms disrupting supply. This combination spurred prices to new
20 highs, reaching \$14.75 on October 5, a couple of weeks after Rita blew through
21 the Gulf. Prices eased a bit from there dipping to \$10.88 before early winter cold

1 caused prices to skyrocket to \$15.78 on December 13th. A very warm last half of
2 December brought prices back down to \$10.88 on the last trading day of the year.

3 Because the price of natural gas is so volatile, SCPC is constantly faced
4 with the exposure of extreme price changes in a relatively short period of time,
5 which can translate into unexpected price increases for the Company's customers
6 that in turn may lead to (i) social and economic costs associated with higher utility
7 bills; and (ii) alternative fuel use and declining use per customer. Recognizing the
8 volatile nature and dynamic tendencies of the natural gas market, SCPC
9 implemented a hedging program in 1995, with Commission approval, in order to
10 mitigate the impacts of price volatility.

11 SCPC's hedging program is purely a financial program that allows the
12 Company to lock in gas prices at a cost in advance thereby providing price protection
13 in the event that natural gas prices increase. Specifically, SCPC's hedging program
14 uses historical consumption data to determine SCPC's exposure to price volatility in
15 the market and then employs the use of financial instruments to reduce or mitigate
16 the Company's exposure to this market risk in a reasonable and disciplined manner.

17 **Q. WHY DID SCPC BEGIN ITS HEDGING PROGRAM?**

18 A. SCPC began its hedging program to utilize additional tools available in the
19 public market to help stabilize the price SCPC, and ultimately its customers, pay for
20 natural gas. Over time the pricing of natural gas has undergone significant changes,
21 from the long-term, low cost contracts of the industry's early years, to the long-term
22 take-or-pay price contracts of the 1970s and 1980s, to the current practice of

1 acquiring gas supplies largely through short-term contracts at current market, or
2 “spot” prices. The reliance upon gas supplies based upon “spot market” prices
3 sharply undermines the ability to anticipate, plan for and control changes in gas
4 prices. As a result, many gas utilities have undertaken activities designed to
5 minimize the impact of price volatility. Price volatility is mitigated through the
6 purchase or sale of financial contracts that have been made available through
7 financial markets such as the New York Mercantile Exchange (“NYMEX”), a
8 nationally recognized market which, among other things, facilitates transactions for
9 the purchase and sale of natural gas and financial instruments related thereto.

10 **Q. DESCRIBE THE PRIMARY GOAL OF THE HEDGING PROGRAM.**

11 A. As stated earlier in this testimony, the hedging program was initially
12 presented to and approved by the Commission in 1995. The primary goal of the
13 program, as originally implemented, was to mitigate price volatility through the
14 purchase of gas financial instruments at the average market price over the long term;
15 this remains the key goal today. Since inception of the hedging program, SCPC has
16 consistently managed the program in a manner designed to achieve this goal over the
17 long term, under prudent management and with the approval of the Commission.

18 **Q. IS THERE A LIMIT AS TO HOW MUCH THE COMPANY CAN HEDGE?**

19 A. Yes. By Commission Order No. 95-1253, the Commission approved a pilot
20 hedging program for SCPC, which allowed the Company to hedge up to thirty
21 percent (30%) of the system supply. Since 1995, however, there have been several
22 changes in the volumes that SCPC was allowed to hedge. For the first five (5)

1 months of the program, SCPC was allowed to hedge up to thirty percent (30%) of the
2 system supply. Based upon the early performance of the program, the Commission
3 allowed an increase to this volume up to sixty percent (60%), and in July 1997, the
4 Commission approved another increase in the amount allowed under the plan up to
5 seventy-five percent (75%) of system supply.

6 Although the Company was authorized to hedge up to 75% of system
7 supply, in practice SCPC only hedged up to 75% of its estimated gas purchases for
8 firm customers, which is derived by averaging the firm purchases for the previous
9 three-years. This practice remains in effect today and has been formally adopted
10 by the Commission. See Order No. 2005-365, wherein the Commission states
11 "SCPC is authorized to continue operating its hedging program at the presently
12 approved level of up to seventy-five (75%) of estimated gas purchases for firm
13 customers." Id. at p. 6.

14 **Q. DOES SCPC ALWAYS HEDGE THE FULL VOLUMES THAT IT IS**
15 **AUTHORIZED BY THE COMMISSION TO HEDGE?**

16 A. No. The model is used as a management guide, decision-making tool, and
17 statistically-based system to assist in making financial hedging decisions and
18 otherwise manage the hedging program. At times, the model may indicate that the
19 level of hedging should be below the authorized level of 75%. Moreover, the Risk
20 Management Committee in an exercise of its oversight responsibilities may decide to
21 implement hedges at levels lower than 75% based upon many factors including, but
22 not limited to, market analysis, consultation with the developer of the model,

1 consultation with other market participants, and other publicly and privately
2 available information.

3 **Q. WHAT MODEL DOES SCPC USE TODAY TO CONDUCT THE HEDGING**
4 **PROGRAM?**

5 A. As a refinement to the hedging program originally instituted in 1995, SCPC
6 adopted in July 1997 a statistics-based system that defines opportunities to lock in
7 prices (through the purchase of futures contracts) as well as to purchase price
8 protection (in the form of call options). This system is known as The Kase
9 HedgeModel_{TM} and was developed by Kase and Company, Inc., a nationally
10 recognized risk management advisory firm specializing in the energy markets. The
11 first month's trading that was conducted using the Kase HedgeModel_{TM} was
12 February 1998 and has been relied upon as one of the tools used in SCPC's hedging
13 program since that time.

14 **Q. WHY DOES SCPC EMPLOY THE USE OF THE Kase HedgeModel_{TM}?**

15 A. The Kase HedgeModel_{TM} is one of the tools we use to attempt to stabilize
16 SCPC's price of gas by locking in purchases of futures at prices that statistical
17 analysis indicates may be low compared to market prices. It also protects SCPC's
18 customers from extremely high prices by recommending the purchase of call options
19 should the market threaten a run to higher prices. Further, the Kase HedgeModel_{TM}
20 focuses on long-term opportunities and reduces the risk that SCPC's customers will
21 have to pay extreme prices for natural gas.

1 **Q. HOW DOES THE Kase HedgeModel_{TM} FUNCTION TO ACHIEVE THE**
2 **HEDGING PROGRAM'S GOALS?**

3 A. As stated earlier in this testimony, the primary goal of the hedging program is
4 to mitigate price volatility through the purchase of gas financial instruments at the
5 average market price over the long term. The Kase HedgeModel_{TM} functions to
6 assist management to achieve this goal by accomplishing two primary financial
7 objectives: (i) lock-in low prices which have a high probability of increasing over
8 the long run; and (ii) purchase price protection when prices are rising or threatening
9 to rise in periods of uncertainty, in order to protect against extreme high price levels.

10 **Q. HOW DOES SCPC CURRENTLY ADMINISTER THE HEDGING**
11 **PROGRAM ON A DAILY BASIS?**

12 A. In order to conduct the hedging program, much market research and analysis
13 are necessary. SCPC receives market information from a variety of sources
14 including: (i) three different daily outlooks from brokers, (ii) a weekly publication
15 from Kase and Company, Inc., and (iii) a quarterly publication from Kase and
16 Company, Inc., which also updates the Kase HedgeModel_{TM} software. All of the
17 above sources of information are largely based on technical analysis of the natural
18 gas market.

19 In addition to its analysis of the periodicals stated above, SCPC also
20 participates in a weekly conference call with Kase and Company, Inc. Moreover,
21 SCPC receives real-time market data via satellite to a computer located in my office.
22 This computer contains software that graphs the data and applies technical indicators.

1 A review of the market fundamentals is also necessary to prepare for the
2 market day. This is done by a review of journals such as *Gas Daily*, *Inside F.E.R.C.*,
3 *Hart's Energy Markets*, and *AGA Storage Report*. It is my job each day to take this
4 information, coupled with the strict guidelines set forth in the hedging program, and
5 make financial trading decisions based on all of the data, both technical and
6 fundamental. It should be emphasized that the hedging program is not used to
7 purchase SCPC's physical supply of gas. Accordingly, prior to the expiration of
8 financial instruments each month, SCPC sells that month's open positions so that
9 physical delivery of the commodity is never effectuated.

10 SCANA's Risk Management Committee ("RMC") establishes the goals and
11 objectives of the program, insures that these goals are executed in a disciplined and
12 consistent manner and requires audits to ensure compliance with the program. The
13 results of the program are reported monthly to the RMC, which monitors the
14 program to ensure that the rules of the program are consistently followed and
15 applied. SCANA also has risk management compliance personnel who
16 independently review the trades daily and verify that they comply with the guidelines
17 of the program.

18 **Q. SINCE ADOPTION OF THE Kase HedgeModel_{TM} IN 1998, HAS SCPC**
19 **FURTHER REFINED ITS HEDGING PROGRAM?**

20 A. Yes. Because of the volatile and dynamic tendencies of the natural gas
21 market, SCPC is constantly evaluating its hedging program and making refinements
22 when necessary in order to further protect against price volatility. Through its

1 continued evaluation of its hedging program SCPC has added functionality by
2 implementing the use of certain innovative financial instruments. It should be noted,
3 however, that as the natural gas market continues to evolve, it might become
4 necessary for SCPC to employ the use of additional financial instruments to assist
5 the Company further in mitigating the effects of price volatility.

6 **Q. PLEASE EXPLAIN A FUTURES CONTRACT.**

7 A. A futures contract is an agreement between a buyer and a seller to make or
8 take cash payment for a physical commodity at an agreed price with the actual
9 delivery date and payment to take place at a set date in the future. Traded on the
10 NYMEX, delivery periods, specifications and locations for delivery, quantity, and
11 the timing and method of payment are all standardized. The standardized quantity
12 is 10,000 MMBtu of gas at the standardized place of delivery, Sabine Pipe Line
13 Co.'s Henry Hub in Louisiana. The NYMEX clearinghouse serves as the
14 intermediary between the two parties engaged in the transaction and stands behind
15 the contract guaranteeing performance. The majority of trades, however, do not
16 culminate in delivery of the physical products as futures contracts are used for
17 price discovery and managing price volatility.

18 **Q. PLEASE EXPLAIN AN OPTION CONTRACT.**

19 A. Options give holders the right, but not the obligation, to buy (call option) or
20 sell (put option) at a specified price (called the strike price) over a specified time.
21 A market participant may buy call options to protect its position in the underlying
22 commodity in the event of a price increase during the period preceding the

1 expiration of the option. For example, if a market participant is short (need to
2 buy) the underlying commodity, it may buy a call option to protect itself against a
3 price increase.

4 On the other hand, a market participant may buy put options to protect its
5 position in the underlying commodity in the event of a price decrease during the
6 period preceding the expiration of the option. For example, if a market participant
7 is long the underlying commodity (need to sell), it may buy a put option to protect
8 its position in the event of a price decrease. In sum, an option contract functions
9 much like an insurance policy, serving to protect the market participant against
10 price volatility.

11 **Q. HOW DOES SCPC MEASURE THE PERFORMANCE OF THE HEDGING**
12 **PROGRAM?**

13 A. Since the inception of the hedging program, SCPC has reported results as
14 measured against a benchmark, in this case the average market price of natural gas.
15 For purposes of the hedging program, the average market price is defined as the
16 simple average of the NYMEX settle price while the given month is the closest
17 nearby being traded. During the period under review a majority of the positions
18 were purchased with the objective of protecting against a run to very high prices.
19 The result was that the average hedging purchase price realized was less than the
20 average NYMEX market price realized during this PGA period and resulted in gas
21 hedges that were lower than the average NYMEX market price.

1 **Q. WHAT HAS BEEN THE EFFECT OF THE HEDGING PROGRAM ON THE**
2 **WEIGHTED AVERAGE COST OF GAS?**

3 A. During the twelve months ending December 31, 2005, the hedging program
4 subtracted \$1,858,132 from the Weighted Average Cost of Gas ("WACOG").

5 Since inception the hedging program has added \$4,792,200 to the WACOG
6 through December 31, 2005 or approximately \$0.0145 per dekatherm. Exhibit
7 No. ____ (JSB-2) shows the results since inception of the program, and Exhibit
8 No. ____ (JSB-3) shows the results on a per dekatherm basis since inception of the
9 program. However, it is important to remember that the primary goal of SCPC's
10 hedging program is to mitigate price volatility through the purchase of gas
11 financial instruments at the average market price over the long term; a goal which
12 is being achieved.

13 **Q. DO YOU HAVE ANY CONCLUDING REMARKS?**

14 A. Yes. In anticipation of approval of the joint application filed with the
15 Federal Energy Regulatory Commission by SCPC and SCG Pipeline, Inc. and the
16 commencement of operations as an interstate pipeline company prior to the 2006-
17 2007 winter gas season, SCPC does not plan to purchase financial instruments for
18 its hedging program beyond September 30, 2006. The financial instruments
19 purchased by SCPC for its hedging program will expire on or before September
20 30, 2006, and no additional contracts will be purchased after that date as any such
21 purchases would not qualify as hedges and would be speculative. However, if due
22 to unforeseen events or circumstances commencement of interstate operations is

1 delayed beyond the 2006-2007 winter gas season, SCPC will resume the hedging
2 program at the approved level of up to 75% as long as SCPC continues purchasing
3 gas for its firm customers.

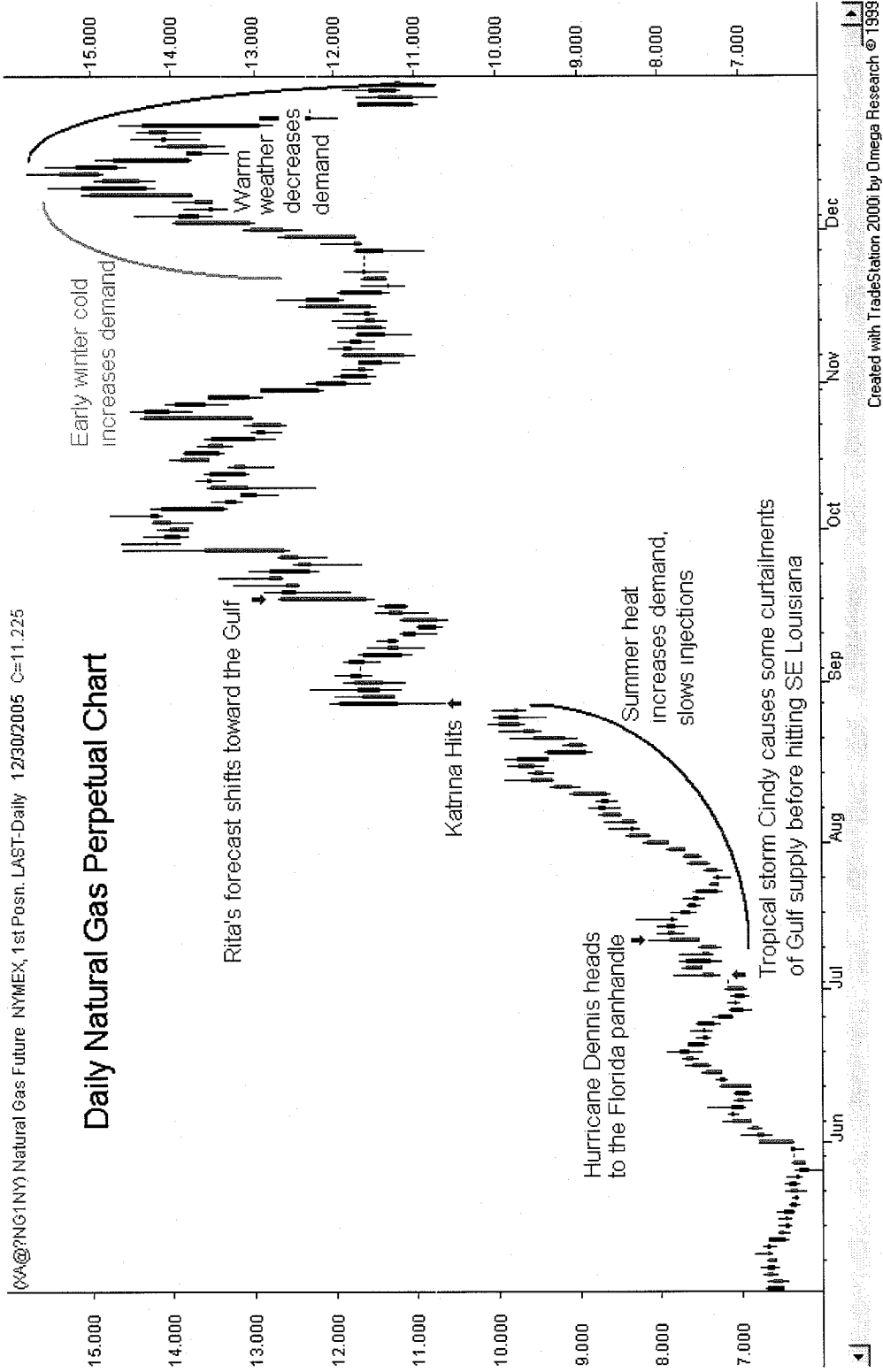
4 **Q. WHAT ARE YOU REQUESTING OF THE COMMISSION IN THIS**
5 **PROCEEDING?**

6 A. While evaluation and education are continual processes which may lead to
7 further refinements in the hedging program, SCPC believes that its hedging
8 program is sound. Further, SCPC believes that the program is a prudent tool,
9 useful in mitigating volatility associated with the price of gas.

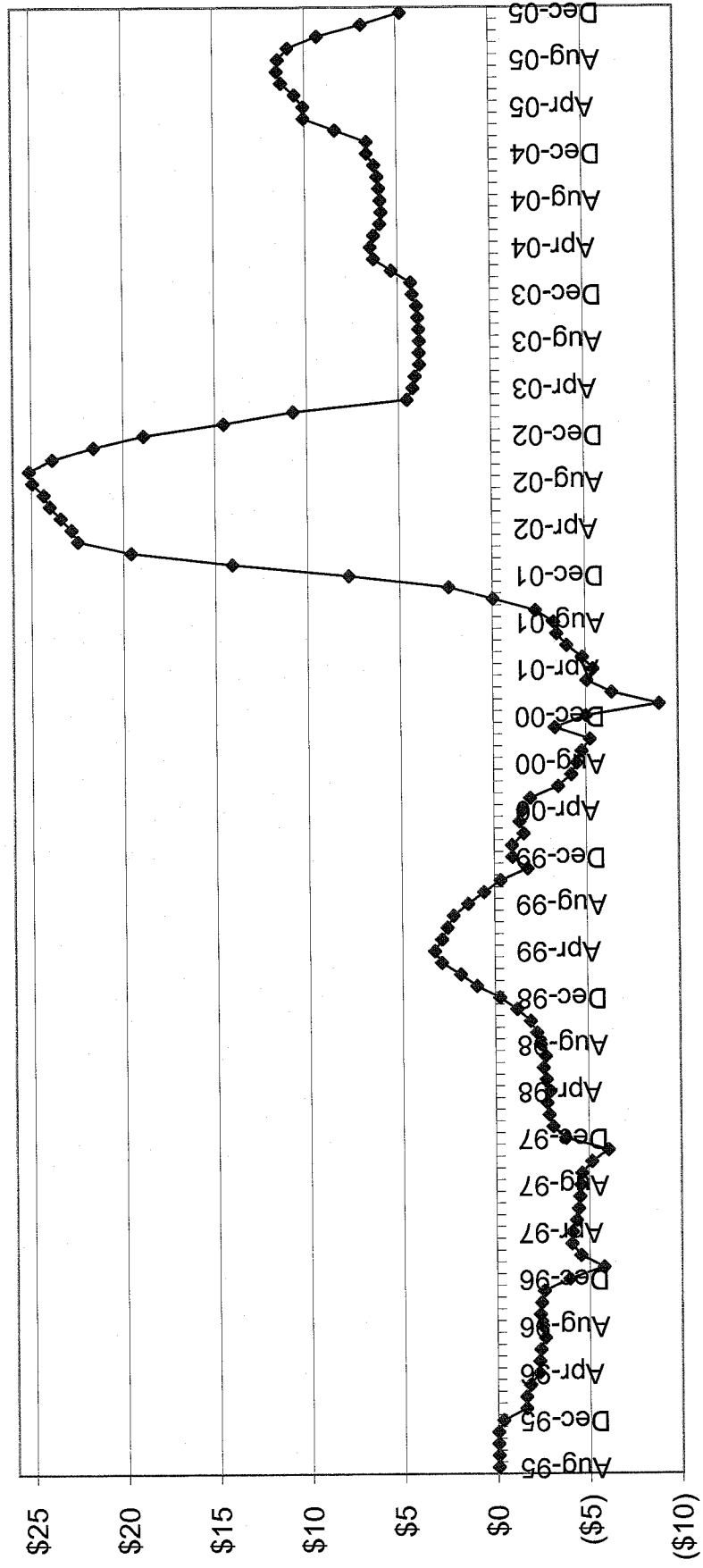
10 Therefore, on behalf of SCPC, I ask that the Commission find that SCPC
11 operated its hedging program in compliance with Commission orders and that
12 SCPC's operation of its hedging program during the period under review was
13 reasonable and prudent. Further, I respectfully request that the Commission allow
14 SCPC to wind down its hedges and continue operating its hedging program at the
15 presently approved level of up to 75% of estimated gas purchases for firm customers
16 as long as SCPC continues purchasing gas for its firm customers.

17 **Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?**

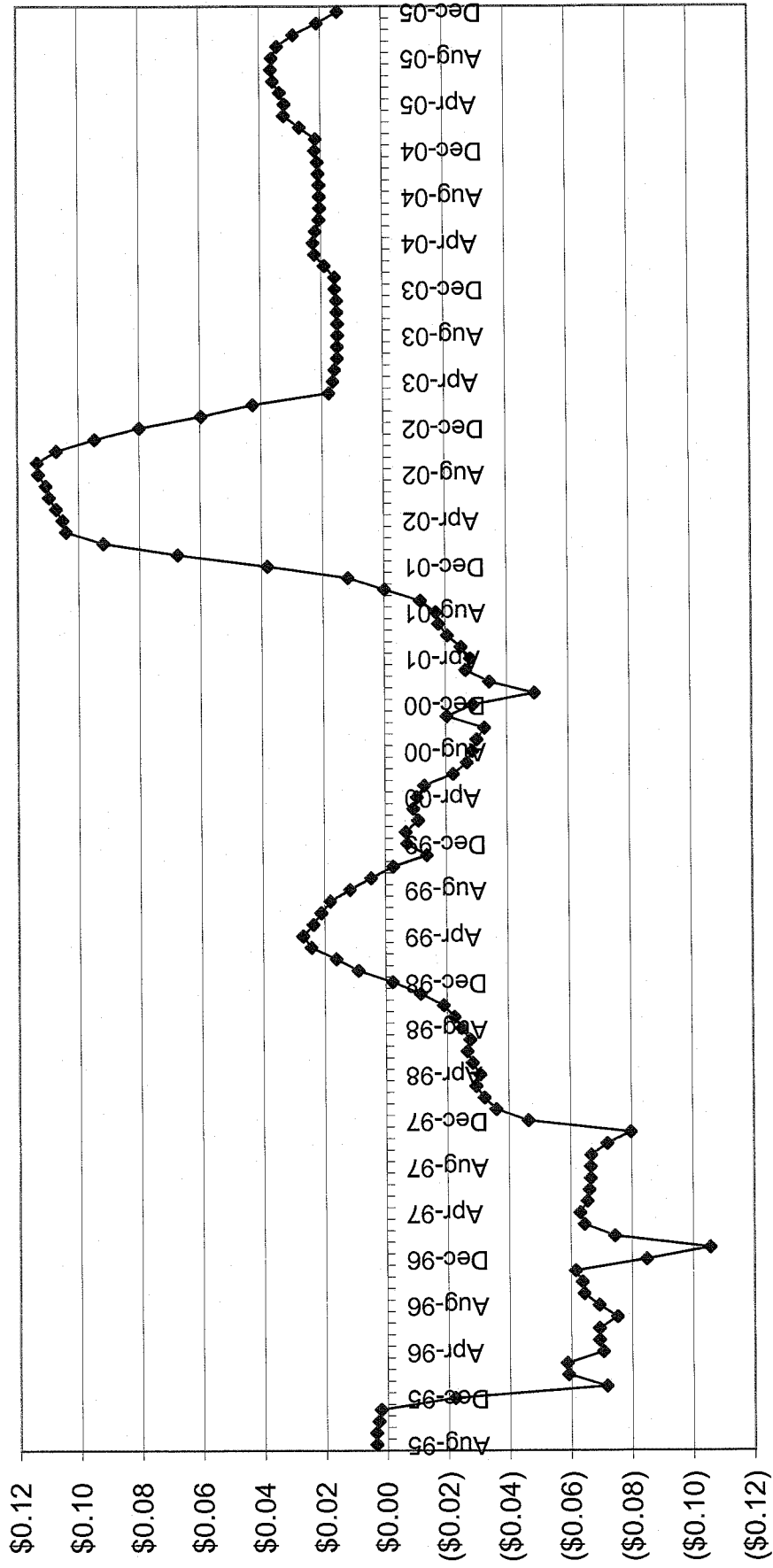
18 A. Yes.



South Carolina Pipeline Corporation **Hedging Program** **Cumulative Effect on the Cost of Gas** **(Subtraction from) / Addition to the Cost of Gas** **(millions)**



South Carolina Pipeline Corporation Cumulative Effect of Hedging Program Dollars per Dekatherm



**DIRECT TESTIMONY OF
THOMAS R. CONARD
ON BEHALF OF
SOUTH CAROLINA PIPELINE CORPORATION
DOCKET NO. 2006-6-G**

RECEIVED
2006 MAY -1 PM 11:07
SC PUBLIC ACCOUNTANTS
COMMISSION

Q. PLEASE STATE YOUR NAME AND GIVE YOUR BUSINESS ADDRESS.

A. My name is Thomas R. Conard, and my business address is 105 New Way Road, Columbia, South Carolina 29224.

Q. WHAT IS YOUR CURRENT POSITION WITH SOUTH CAROLINA PIPELINE CORPORATION?

A. I am Assistant Controller at South Carolina Pipeline Corporation ("SCPC" or "Company").

Q. PLEASE DESCRIBE YOUR EDUCATION AND BUSINESS EXPERIENCE BACKGROUND.

A. I am a graduate of the University of South Carolina receiving a Bachelor of Science degree in Finance in 1971 and a Master of Accountancy degree in 1979. I joined South Carolina Electric & Gas Company ("SCE&G") in June 1980 where I held various positions in Accounting, Information Services Technology, Fossil Hydro Business Unit, and Retail Electric Business Unit. In November 1998, I became Manager of Accounting, Finance and Regulatory at SCPC, and in May 2003, I was promoted to my present position – Assistant Controller. I am licensed as a Certified Public Accountant in the State of South Carolina, and I am a member of the American Institute of Certified Public Accountants as well as the South Carolina Association of Certified Public Accountants.

1 **Q. PLEASE SUMMARIZE YOUR DUTIES WITH SCPC.**

2 A. As Assistant Controller, my corporate responsibilities include oversight of the
3 books and records of SCPC, including all accounting and reporting functions.

4 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

5 A. The purpose of my testimony is to inform the South Carolina Public Service
6 Commission ("Commission") of the practices of SCPC with regard to gas cost
7 recovery for the twelve-month period of January 1, 2005 through December 31,
8 2005.

9 **Q. HOW ARE THE BOOKS AND RECORDS OF THE COMPANY**
10 **MAINTAINED?**

11 A. The Company maintains its books and records for regulatory reporting and
12 accounting in conformity with the Uniform System of Accounts as prescribed by the
13 Federal Energy Regulatory Commission and as adopted by the Commission.

14 **Q. BRIEFLY EXPLAIN THE STEPS THE COMPANY TAKES TO INSURE**
15 **THAT ITS BOOKS AND RECORDS ARE ACCURATE AND COMPLETE.**

16 A. SCPC has historically maintained an extensive system of strict internal
17 accounting controls supplemented by formal policies and procedures, including
18 financial oversight by the Audit Committee of the Company's Board of Directors. In
19 addition to SCPC's accounting transactions and reports being audited by SCANA
20 Corporation's ("SCANA") internal auditors, these transactions and reports are
21 audited by SCANA's external auditors, Deloitte & Touche. Deloitte & Touche also
22 audits SCPC's revenue and cost of gas transactions quarterly.

1 In addition to internal and external accounting controls and audits, SCPC has
2 documented all critical controls for compliance with the Sarbanes-Oxley Act. These
3 controls have been reviewed, tested and approved by SCANA personnel as well as
4 Deloitte & Touche.

5 **Q. IS SCPC SUBJECT TO ANY FURTHER OVERSIGHT?**

6 A. Yes. As a regulated utility under the jurisdiction of the Commission, SCPC
7 is subject to reviews by the Commission as well as regular audits conducted by the
8 Office of Regulatory Staff. Further, the Company is subject to regular audits and
9 reviews by various taxing authorities, such as the Internal Revenue Service and the
10 South Carolina Department of Revenue. Additionally, SCANA files regular
11 reports with the United States Securities and Exchange Commission containing
12 information related to SCPC, which reports are subject to audit and review.

13 **Q. WHAT CLASSES OF CUSTOMERS DOES SCPC SERVE?**

14 A. Overall, SCPC has two major classes of customers: (1) sale for resale and (2)
15 industrial. Both of these customer classes are further divided into firm and
16 interruptible categories, a distinction that I will discuss later in my testimony.

17 **Q. PLEASE DESCRIBE THE SALE FOR RESALE CUSTOMERS.**

18 A. SCPC's sale for resale customers are an investor-owned utility, natural gas
19 authorities, and municipalities that operate gas distribution systems serving
20 residential, commercial, and industrial customers. In essence, the sale for resale
21 customers purchase natural gas from SCPC on a firm or interruptible basis and then
22 resell the purchased gas to its residential, commercial, and industrial customers. In

1 addition to categorizing sale for resale customers as either firm or interruptible,
2 SCPC also classifies its sale for resale customers according to the type of service that
3 the customer receives, such as Distributor Service (“DS-1”), Distributor Interruptible
4 Supplemental Service (“DISS-1”), Resale Firm Transportation Service (“RFT”), and
5 Resale Firm Transportation – Peaking Service (“RFP”).

6 **Q. PLEASE EXPLAIN THE DIFFERENCE BETWEEN A CUSTOMER WHO**
7 **RECEIVES GAS SERVICE ON A FIRM BASIS AND A CUSTOMER WHO**
8 **RECEIVES GAS SERVICE ON AN INTERRUPTIBLE BASIS.**

9 A. Regardless of whether a customer is a sale for resale customer or an industrial
10 customer, SCPC further divides these customers into classes designated as either
11 firm or interruptible. A firm customer is one who receives gas on a priority basis and
12 anticipates no interruptions, under normal circumstances. For example, a firm
13 customer will typically enter into a contract with SCPC for the delivery of a specified
14 volume of gas on a daily basis. Pursuant to the contract with the customer, SCPC is
15 obligated to deliver up to the firm quantity of gas that the customer has requested
16 under the terms of the contract. The amount of gas that SCPC is obligated to deliver
17 under the terms of the contract is called the Maximum Daily Quantity (“MDQ”).

18 The firm customer is obligated to pay a monthly fixed charge for the MDQ
19 regardless of whether the customer accepts delivery of the gas. This charge is called
20 a demand charge. In addition to the demand charge, the customer also pays a charge
21 for all volumes of gas actually delivered to the customer during the course of a given

1 month. This charge is called a commodity charge. I will discuss both of these
2 charges in greater detail later in my testimony.

3 An interruptible customer, on the other hand, is one that receives interruptible
4 gas service from SCPC, meaning that SCPC is not contractually or otherwise
5 obligated to deliver specific volumes of gas within a given period of time. Upon
6 short notice, SCPC possesses the right to "interrupt" the interruptible customer's gas
7 service, according to the curtailment plan approved by the Commission. In
8 summary, the curtailment plan authorizes SCPC to curtail gas service to its
9 interruptible customers on a priority basis, which is based upon the category of
10 service that the interruptible customer receives.

11 **Q. PLEASE DESCRIBE THE RATES APPROVED BY THE COMMISSION**
12 **AND CHARGED TO SALE FOR RESALE CUSTOMERS FOR FIRM**
13 **SERVICE.**

14 A. SCPC charges for providing firm natural gas service to its sale for resale
15 customers through a two-part demand/commodity rate structure set forth in SCPC's
16 approved gas tariff. By Commission Order No. 90-729, the Commission approved
17 the methodology underlying the current rate structure. Since 1990, the Commission
18 has approved several modifications to the gas cost recovery formula established by
19 Order No. 90-729.

1 **Q. PLEASE DESCRIBE THIS TWO-PART DEMAND/COMMODITY RATE**
2 **STRUCTURE THAT APPLIES TO SCPC'S SALE FOR RESALE**
3 **CUSTOMERS.**

4 A. Under the rate structure approved in Order No. 90-729, SCPC's charges for
5 firm service to sale for resale customers are made through two rate components: a
6 demand charge and a commodity charge.

7 The demand charge is further divided into two (2) components: (i) the
8 Demand Charge Cost of Gas and (ii) the Cost of Service Demand Charge. Pursuant
9 to Section 7(a) of SCPC's tariff, the Demand Charge Cost of Gas for each dekatherm
10 ("Dt") of MDQ is determined monthly on a weighted average basis of all such firm
11 quantities that SCPC is obligated to deliver, i.e., the MDQ. The Demand Charge
12 Cost of Gas includes all demand and capacity charges that SCPC pays suppliers to
13 obtain guaranteed supplies of gas as well as the upstream demand charges and the
14 upstream cost of service demand charges. The second component of the demand
15 charge is called the Cost of Service Demand Charge, which is designed to recover
16 SCPC's fixed costs, excluding its return on investment and associated income taxes.
17 The Cost of Service Demand Charge is set at \$3.5924 per dekatherm of MDQ for
18 sale for resale customers.

19 The commodity charge is simply the monthly Weighted Average Cost of Gas
20 ("WACOG") multiplied by the volumes delivered to the customer plus the approved
21 tariff markup of \$0.0753, also multiplied by the volumes delivered. I will discuss the
22 WACOG calculation in detail later in my testimony.

1 **Q. HOW DOES SCPC CHARGE FOR NATURAL GAS SERVICES TO ITS**
2 **INDUSTRIAL CUSTOMERS?**

3 A. In Commission Order No. 10,391, which was issued in 1957, the Commission
4 authorized the Company to “contract with industrial customers buying directly from
5 the pipeline on terms and conditions mutually satisfactory to the respective parties.”
6 Consequently, all industrial customers have negotiated contracts with SCPC which
7 establish the rates to be charged to the customer. The billing rate for firm industrial
8 customers includes a demand and commodity component. The demand component
9 includes the Demand Charge Cost of Gas based on the customer’s contracted MDQ.
10 The commodity component is the monthly WACOG plus the negotiated contractual
11 markup, multiplied by the volumes of natural gas delivered during the month.

12 The interruptible industrial customers’ billing rate is the monthly WACOG
13 plus the negotiated contractual markup. However, for those industrial customers
14 participating in the Industrial Sales Program-Rider (“ISP-R”), the billing rate is the
15 negotiated competitive sales price which meets the customer’s alternative fuel price.
16 Included in this negotiated competitive sales price is gas cost plus the negotiated
17 contractual markup, which in the aggregate cannot exceed the authorized maximum
18 markup established by Commission Order No. 82-898.

19 **Q. PLEASE EXPLAIN THE WEIGHTED AVERAGE COST OF GAS.**

20 A. In my testimony I have made reference to the Weighted Average Cost of Gas,
21 which is commonly referred to as “WACOG.” Pursuant to Commission orders and
22 SCPC’s tariff, the WACOG is a calculation of the cost of gas which is comprised of

(i) 20,000 Dt of the least expensive daily delivered gas volume, (ii) the actual price paid for gas, including the actual transportation costs incurred for the delivery of the gas to South Carolina and charged to firm and interruptible customers, (iii) weighted average cost of storage gas withdrawals, (iv) direct cost and additions to and reductions from the cost of gas associated with hedging activities, (v) demand costs associated with all reserve firm capacity, (vi) credits associated with released firm capacity, and (vii) gas costs associated with the unaccounted for gas volumes and compressor fuel, excluding any demand charges.

Q. WHAT IS THE IMPACT OF COMMISSION ORDER NO. 94-181 WHICH REQUIRES 20,000 DT A DAY OF THE LEAST EXPENSIVE DELIVERED GAS BE RESERVED FOR THE WACOG?

A. The impact of complying with Commission Order No. 94-181 has been two-fold. First, Order 94-181 has reduced the cost of gas for SCPC's sale for resale customers by reducing the WACOG which, in turn, reduces the commodity charge assessed by SCPC to its sale for resale customers.

The second impact of complying with Order No. 94-181 relates to how it impacts SCPC's ability to earn its approved margins from ISP-R customers. Specifically, reserving 20,000 Dt per day of the least expensive gas to the WACOG adversely impacts the ability of SCPC and its sale for resale customers to compete successfully with alternative fuels of industrial customers, which has resulted in lost financial opportunities. During the twelve months ending December 31, 2005, SCPC lost \$1,309,471 of approved margin as a direct result

1 of this order. For this same time period, the sale for resale customers lost
2 \$119,689 as a direct result of this order. Exhibit No. ____ (TRC-1) documents the
3 adverse impact on margins.

4 **Q. PLEASE DESCRIBE THE PROCEDURES FOLLOWED BY SCPC FOR ITS**
5 **GAS COST RECOVERY.**

6 A. SCPC's gas cost recovery is based on the recovery of delivered gas costs.
7 Delivered gas costs are both the actual purchase price paid for gas and the actual
8 transportation costs incurred for the delivery of the gas to South Carolina. Each
9 month, after certain gas cost assignments are made, actual delivered gas costs are
10 aggregated and divided by the delivered volumes. This calculation produces the
11 WACOG. The WACOG calculation includes the following:

- 12 • In compliance with the approved gas tariff, storage gas withdrawals
13 are assigned the weighted average cost of stored gas. A weighted
14 average cost of stored gas is calculated for each separate storage
15 facility utilized by SCPC.
- 16 • In compliance with Order No. 94-181, 20,000 Dt of the least
17 expensive daily delivered gas volumes are reserved for the monthly
18 WACOG.
- 19 • In compliance with Order No. 83-873, delivered gas costs are assigned
20 to competitive gas sales made through the ISP-R.

- In compliance with Order No. 95-1253, direct costs and additions to and reductions from the cost of gas associated with hedging activities are included in the monthly WACOG.
- In compliance with Order No. 96-336, the demand costs associated with all reserve firm capacity are included in the monthly WACOG.
- In compliance with Order No. 97-477, credits associated with released firm capacity are included in the monthly WACOG.
- In compliance with Order No. 97-477, gas costs associated with the unaccounted for gas volumes and compressor fuel, excluding any demand charges, are recovered through the WACOG.

Q. HOW ARE COSTS ASSIGNED TO THE INDUSTRIAL SALES PROGRAM RIDER?

A. As Mr. Dozier explained in his testimony, the ISP-R is essential to maintaining the industrial service that is so important to our system and all of our customers. As provided in Order No. 90-729, SCPC and certain of its sale for resale customers are permitted to compete with alternative competitive fuels of industrial customers. Order No. 98-298 clarified that gas-to-gas competition is authorized under the ISP-R program. On a monthly basis, gas costs assigned to competitive sales are determined by reviewing each competitive sales price less the negotiated markup in the service agreement. SCPC's gas cost requirements and those of its sale for resale customers are then aggregated. Gas purchases are reviewed and assigned to meet as nearly as possible these gas cost requirements.

1 In the event that aggregate net revenues received from ISP-R sales exceed
2 aggregate net revenues authorized by the Commission, an ISP-R sales credit is
3 created. This credit is used to lower the Demand Charge Cost of Gas. Thus, in no
4 case does SCPC realize more margin than the contractual markup.

5 **Q. DO YOU HAVE ANY CONCLUDING REMARKS?**

6 A. Yes. SCPC's recovery of its gas costs has been carefully made in
7 compliance with Commission orders and the approved gas tariff. In fact, SCPC's
8 monthly cost of gas calculation results in the precise recovery of actual gas costs
9 incurred by the Company. I therefore respectfully request, on behalf of South
10 Carolina Pipeline Corporation, that the Commission find that the Company's gas
11 cost recovery is in full compliance with SCPC's tariff and Commission Orders.

12 **Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?**

13 A. Yes.

South Carolina Pipeline Corporation
Effect of 20,000 DTs/Day Reserved for WACOG
In Compliance with Order No. 94-181

Year	SCPC Margin Loss	Sale-for-resale Margin Loss
12 Months Ending December 1998	\$ 2,115,865	\$ 223,358
12 Months Ending December 1999	\$ 1,842,697	\$ 270,961
12 Months Ending December 2000	\$ 2,035,358	\$ 173,434
15 Months Ending* December 2002	\$ 6,796,612	\$ 368,745
9 Months Ending* December 2002	\$ 2,167,046	\$ 243,693
12 Months Ending December 2003	\$ 605,642	\$ 74,112
12 Months Ending December 2004	\$ 1,228,801	\$ 359,512
12 Months Ending December 2005	\$ 1,309,471	\$ 119,689
Totals	\$ 18,101,492	\$ 1,833,504

* Purchased Gas Adjustment ("PGA") proceedings typically review SCPC's policies, practices and gas costs recovery procedures for twelve-month periods. Longer or shorter periods may be reviewed by the Commission, however, as was done for the periods designated above.